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THESIS

FRANCE, WEST GERMANY, AND THE SECURITY
OF THE PERSIAN GULF

by

David L. Leonard

March 1982

Thesis Advisor:

David S. Yost

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France, West Germany, and the Security
of the Persian Gulf

by

David L. Leonard
Lieutenant, United States Navy
B.S., The Pennsylvania State University, 1974

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

NAVAL POSTGRADUATE SCHOOL
March 1982

ABSTRACT

The series of events which began with the Arab oil embargo in 1973 and recently culminated in the Iranian Revolution, the Soviet invasion of Afghanistan, and the Iran-Iraq Conflict have underscored the vulnerability of Western oil supplies from the Persian Gulf region. This research analyzes the potential role of France and West Germany as U.S. allies in relation to the problem of ensuring the security of the Persian Gulf while maintaining the credibility of deterrence in Europe. Included in this analysis are assessments of French and West German dependence on Persian Gulf oil supplies and an evaluation of each country's capability and intention to contribute to the security of the region. The conclusion reached is that neither country in the near-term has a viable alternative to political and military efforts to protect their energy security. Moreover, each country possesses unique capabilities to complement U.S. efforts in this area, but the policy of France conforms more to American policy than that of the traditionally staunch supporter of U.S. policies, West Germany.

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I. INTRODUCTION

The series of events which began with the Arab oil embargo in 1973 and recently culminated in the Iranian revolution, the Soviet invasion of Afghanistan, and the Iran-Iraq conflict have underscored the vulnerability of Western oil supplies from the Persian Gulf Region. These events served notice that extra-European events could pose threats to Western security of equal or possibly greater significance than the Soviet threat in central Europe. When the 1973 crisis occurred, the West European governments found that they were heavily dependent on Middle Eastern and Persian Gulf oil at a time when they had just completed a gradual but continuous withdrawal of military influence from these regions.

The ensuing search for oil security by the Western industrial powers after 1973 consisted of a two-fold attempt to decrease dependence on Persian Gulf sources while increasing economic and military interdependence between themselves and the oil-producing states via increased industrial cooperation and arms transfer arrangements. The Iranian revolution highlighted the pitfalls of the latter strategy and its corollary, the belief that security and stability in the Persian Gulf area could be assured solely by the creation and maintenance of a regional Western-leaning military power

such as Iran. The Iran-Iraq conflict (and the resulting loss of a large share of Middle East oil production) revealed that the major industrial countries had failed to significantly reduce their energy dependence on the major oil producers by 1980. Finally, the Soviet invasion of Afghanistan solidified the notion that these previous strategies to ensure the flow of Western oil supplies could not, except in the long term, replace individual or multilateral Western efforts to become capable of direct political and/or military intervention to protect their interests in the Persian Gulf.

Since the end of World War II, the security interests of the United States and those of Europe have been intimately related and have been institutionalized through the creation of the North Atlantic Treaty Organization (NATO). This reality, plus the fact that most of the Western European states are highly industrialized, energy-consuming nations like the U.S., creates a joint interest in the continued safe flow of energy from the Persian Gulf. Of particular importance to American security interests are the two most powerful continental allies, France and the Federal Republic of Germany (FRG). Because of the centrality of these two countries to American security, this research will focus on the importance of Persian Gulf energy supplies to France and West Germany, analyze the role which they see themselves assuming in jointly securing the safe flow of

energy from this area, and point out areas of continuity and discontinuity with American perceptions.

Naturally, the problem of ensuring adequate access to energy sources is not one unique to France, West Germany, or the United States, nor even to NATO countries alone. Other Western-oriented industrial countries such as Japan, Australia, and New Zealand are to varying degrees concerned with the problem and are potential contributors to the solution. In addition, other members of NATO are affected by the problem directly and indirectly. While not all NATO countries are directly affected by dependence on Persian Gulf energy, all are subjected to the reality that the protection of energy supplies from this region is not a task that can be viewed in isolation. This task is intimately related to the primary function of NATO--the defense of West Europe and North America. In an era of limited defense resources and economic stringency, the deployment of defense assets has become almost a zero-sum endeavor. Almost any asset earmarked by Western powers for Persian Gulf contingencies becomes an asset which is no longer available for Europe. Therefore, all NATO nations have an interest in the efficient protection of Persian Gulf energy flow.

This analysis of France and West Germany as American partners in the protection of energy supplies will be organized into four major sections. The first section will concentrate on the effects of the 1973 oil embargo on these

two countries and their ensuing efforts to reduce dependency on energy imports from the Persian Gulf region. A summary of their progress from 1973 to 1980, when the second oil shock after the Iran-Iraq conflict occurred, will show that neither country to a significant degree improved its energy security. Neither country in the near future will therefore be able to rely on alternative sources of energy or conservation as a substitute for political and military effort to protect their energy security.

The second section will focus on the role of France in the protection of Western oil supplies. Due to the nature of France's foreign policy and global interests, this analysis will briefly examine France's capabilities and intentions vis à vis the defense of Europe before turning to a more comprehensive analysis of her overseas policy and capabilities, especially as they relate to naval matters and the protection of sea lanes of communication. France, despite espousing an adamantly independent policy, will find her interests and policies increasingly paralleling those of the United States, owing to her resource constraints.

The third section will examine the role of West Germany in the protection of Western oil supplies. Because of the overwhelming regional nature of West Germany's defense interest, the examination of her military capabilities and potential contribution will center on the European theater. Despite a declaratory policy of complete solidarity with

American policies, it appears that the Federal Republic is increasingly assuming a stance more independent of American policies.

The final section will identify similarities and differences that characterize the policies which France and West Germany have pursued in relation to the threats to their security that have arisen since 1973 in the Persian Gulf area. When these policies are in turn compared to American perceptions and policies, a somewhat surprising conclusion is reached. The "independent" policy of France conforms more to American policy than that of the traditionally staunch supporter of U.S. policies, West Germany.

II. FRANCE, WEST GERMANY, AND THE ENERGY CRISIS

One of the most difficult and dangerous problems facing the Western industrial nations today is their dependence on external sources of energy, primarily from the Middle East. The independence and security of West Germany and France, our major European continental partners in NATO, are of primary importance to the security of the United States. Therefore, it is important for the U.S. to understand the degree of energy dependence of these countries on the Middle East suppliers and their prospects for the future.

It is often accepted as dogma that a sudden cut-off of Organization of Petroleum Exporting Countries' (OPEC) supplies, over which Western countries have little or no control, would bring immediate catastrophe and set off major political shock waves, particularly in West Germany and France. In this paper, I will analyze the validity of this hypothesis by comparing the energy policies and problems of West Germany and France. This comparison will include the following topics:

- (1) the background of West German and French energy policies from World War II to the "first shock wave" in 1973.
- (2) the 1973 Arab oil embargo.

(3) the events from the 1973 oil embargo until the "second shock wave" in 1979.

(4) the "second shock wave" in 1979.

(5) future prospects and new approaches.

A. POLICY FROM WORLD WAR II TO 1973

In a broad sense the energy policies of France and West Germany pursued a similar course which was typical of Europe as a whole from the end of World War II until the Arab oil embargo of 1973. Both were included in the fundamental shift that took place in Europe's energy position after the Second World War, in which the coal-mining industry shrank drastically, and Europe lost its self-sufficiency in energy that it had previously enjoyed. European governments felt increasingly free to rest their economies on cheap and seemingly safe supplies of Middle Eastern and North African oil. In West Germany and France the annual growth in demand for oil during the years 1960-1972 was 12.6 percent and 14.1 percent, respectively.

[Ref. 1: p. 6]

The different set of rules that governed the petroleum and coal markets were an outgrowth of the European Community's organization which from its inception treated coal and oil as separate commodities. The treaty that instituted the European Coal and Steel Community (ECSC) in 1951 placed the policy for coal with that organization. Atomic energy policy was left primarily in the hands of the

individual states with some power granted to Euratom, and other energy sources were entrusted in 1959 to the European Economic Community (EEC). No provision was made for a common energy policy, and those of the various Community institutions were extremely diverse. For example, the ECSC imposed special rules for the disclosure of price and commercial practices that had no parallel with respect to other energy sources in the EEC. For this reason, as well as others, production and marketing were much less flexible for coal than for petroleum. [Ref. 3: p. 43]

Fearful of the return to the monopolistic practices of the pre-war period, the ECSC maintained a rigid control over the coal market. In addition to enforcing market disclosures and non-discrimination in sales to customers, it limited the use of restrictive agreements or mergers among enterprises. As a result prices in the various countries were held down artificially without regard for production costs of the various coal deposits and the competitive situations in the various regional markets for alternative fuels.

On the other hand, no rules existed for limiting the entry of the multinational oil companies into the European market. These already enjoyed various advantages over the coal industry, including a greater operating flexibility because of size and international structure, as well as the numerous advantages that petroleum as a source of energy compared to coal enjoyed such as availability as energy for

for the rapidly growing automobile market. As a result an oligopolistic battle developed between the major oil companies on one side and the nationalized or cartelized coal companies on the other in which the oil companies held the advantage. Variable costs in the coal industry were based mainly on wages, accounting for about 60 percent of the total, and tending to rise. Variable costs in the oil industry were mainly royalties and benefit taxes in the 1960s constituting about 15 percent of the consumer price in Western Europe. Average fixed capital costs for oil tended to decrease during this period with such factors as the increase of tanker capacity. The result was that the price of oil calculated on a caloric basis, was about equal to that of coal in 1955-1957 and fell to about 70 percent of the price of coal in 1971. Thus coal gave way to oil, its share in the overall energy market falling from 61.2 percent in 1960 to 22.2 percent in 1972. [Ref. 2: p. 7]

In spite of the protectionist measures taken in favor of coal, the high coal labor costs and the more efficient and flexible oil company policies spelled the demise of the European coal industry by 1973. From time to time, particularly in the mid-fifties, some European governments expressed concern over the possibility of an international energy shortage and the risks posed by an excessive reliance on foreign energy sources. Nevertheless, steps to reactivate coal production never materialized. From the early 1950s

the policies of European governments toward the energy market were based, at least in part, on the conviction that the cost of energy represented an important variable in the costs of industrial production and low-cost energy was considered vital in determining the position European industry would have in the international market. European governments deluded themselves with the notion that economic interdependence with the producer states would somehow protect them from serious supply difficulties. Thus when the 1973 crisis occurred the European governments found that they were heavily dependent on Middle Eastern oil at a time when they had just completed a gradual but continuous withdrawal of military influence from the region.

In this situation of general energy dependence, each European nation responded according to its philosophy, institutions, and interests including the approach to the regulation of materials. In this context the approach to the energy situation differed markedly in France and West Germany; the French relying on government planning and interventionist policies and the Germans relying on market conditions. The contrast may be summed up in the priorities which West Germans and Frenchmen have brought to bear on oil industry problems and many other economic problems in the past: the German idea of conforming to the market and the French idea of directing the industry according to the national interest. In addition when the great conversion to

oil began in the 1950s, Germany and France found themselves in different positions regarding access to oil abroad.

Long before the massive conversion to oil, France sought to emulate America and Britain in acquiring crude oil concessions abroad for national companies. The French enjoyed initial success through the acquisition of Germany's share of Mesopotamian concessions as booty following World War I and in 1924 the Compagnie Francaise des Petroles (CFP) was founded on the French government's initiative for the purpose of exploiting and processing this oil.

[Ref. 4: p.19] This French success was tempered by their failure to achieve entry into what became, after World War II, the most important oil area in the world--Saudi Arabia. When, in 1946-47, Socal and Texaco proceeded to organize ARAMCO (Arabian American Company) by taking Exxon and Mobil into their Arabian venture, CFP pressed for admittance to the partnership, but the American companies refused to admit the French. The French have never forgiven the Americans for keeping them out of Saudi Arabia, and ARAMCO's success with Arabian oil in the years that followed--not the least in the French and European markets--only increased their resentment. It also accentuated the French animosity to the role of the U.S. major oil companies in the French oil market. [Ref. 4: p. 20]

However, early on the French had established a policy to promote a French petroleum industry at the expense of the

international oil companies. The legal basis of this policy was a set of laws that came into effect on January 10, 1925, April 4, 1926, and March 30, 1928, respectively. These laws established a state monopoly for hydrocarbon imports which the government then delegated to public and private companies. Foreign and French companies obtained their import licenses on conditions that usually included a commitment to a specific volume of refinery capacity in France and a high level of stockpiling. [Ref. 5: p. 99]

In 1955 the French petroleum policy was crowned with success in Algeria (prior to its independence in 1962) where oil was struck. In 1960, the state corporation, Union Générale des Pétroles (UGP), was formed in order to refine and sell the crude produced by French companies in the Algerian Sahara. Because the Algerian Sahara was still French territory and because the major international companies were only marginally represented there, the UGP was able to enter the French market successfully as a newcomer. It became a rival to the previously mentioned CFP which by then was a semi-public corporation with state financial participation of 35 percent. [Ref. 5: p. 99]

In 1963 the French government reorganized the petroleum market. The new import regime, the government-owned Entreprises de Recherches et d'activités Pétrolières (ERAP), came into effect in 1965 and favored the French companies, the UGP in particular, at the expense of the

multinationals. This new regime was specifically designed to give the CPF the task of defending the national interests among the club of international companies and of allowing ERAP (later ELF-ERAP) to act as agent for French policy in negotiations and relations with producer countries.

Thus the French, in contrast to a general air of complacency in Europe, were aware of the risks of overdependence on oil imports and by the early 1960s, although resigned to the need for oil imports, had taken steps to maximize and control the proportion that came from French-controlled areas. Under this policy in 1961, France drew 32 percent of her crude oil imports from Algeria and 20 percent from Iraq; thus receiving more than half of her crude oil imports from sources under French political, or at least French company, control. French companies then produced 33 million tons of crude oil in the "franc zone" or elsewhere, which was equivalent to 94 percent of French crude oil imports. [Ref. 4: p. 20]

Unfortunately, by 1973 the loss of political control and company properties in Algeria had largely erased previous French success. In that year only 8 percent of French crude oil imports were still coming from Algeria and another 2 percent from other former franc-zone sources. French-owned companies still produced a respectable volume of crude worldwide, but this now only corresponded to 62 percent of French imports. Even worse the footing of the French companies in the OPEC countries where 87 percent of their crude originated

was no more secure than that of other Western countries.

[Ref. 4: p. 21]

West Germany, as was noted earlier in contrast to France, was a more consistent follower of the free-enterprise system and at the beginning of the 1950s had no extraterritorial crude oil base under political or German company control. But it had a small domestic production (three million tons in 1955) which at the low consumption level at the time actually supplied almost one-third of the country's oil consumption. Coal liquification, which at the height of World War II had supplied about four million tons of petroleum products, had dwindled to insignificance because of wartime bombing and postwar military government prohibitions.

West Germany's hard and soft coal deposits are the largest in Europe, but for many years Germany had no energy policy other than to protect coal against oil using a heavy discriminatory tax on oil and taxation of imported coal. Nevertheless, the share of coal in primary energy consumption fell from 75 percent in 1960 to 31 percent in 1973 while the share of oil rose during the same period from 21 to 56 percent. [Ref. 2: p. 51] Meanwhile, Germany remained for a long time the only large European state with no direct interest in the oil business. The U.S. and Anglo-Dutch major oil companies controlled the bulk of refineries and of the distribution network. Germany had

to rely on crude oil imports from sources outside German political jurisdiction and outside German company control.

As can be seen from the preceding discussion what in the early 1960s still looked like a decisive difference between France, with a large independent crude oil base, and Germany, without one, became in the early 1970s more of a similarity between two oil have-nots, with their remaining difference being the French oil companies' size and international integration and involvement.

Energy consumption patterns in France and Germany evolved similarly during the time of the great conversion to oil. In 1925 energy still meant reliance on coal in both countries. In 1950 it meant oil to 20 percent consumption in France, but to only 4 percent in West Germany. By 1965 oil's share was approaching 50 percent in both countries; in 1973 it had reached 72 percent in France and 58 percent in Germany. [Ref. 4: p.31]

Crude oil imports followed a similar pattern with consumption in the two countries. Both France and Germany, that is the refining companies operating within their borders, drew almost exclusively on Middle Eastern and African sources for the expansion of their crude oil imports at that time. France was dependent upon Iraq and Algeria until the debacle there, and thereafter by 1973 relied upon Saudi Arabia, Kuwait, Iraq, other Persian Gulf sources, and Nigeria. Germany by 1973 was dependent mostly

on Saudi Arabia, Nigeria, and Algeria. In 1973 the Arab countries of the Persian Gulf loomed much larger in French than in German imports of crude oil (64 percent versus 37 percent); those of North Africa much larger in German than in French imports (36 and 13 percent, respectively). While all other countries together from Iran to the U.S.S.R. supplied roughly comparable shares of French and German imports (24 and 28 percent, respectively). [Ref. 4: p. 34] As these figures portray, on the eve of the 1973 Arab oil embargo, both West Germany and France were in a tremendously vulnerable position.

B. THE 1973 ARAB OIL EMBARGO

The petroleum crisis beginning in October, 1973, actually had two phases: the first, a reduction in oil production; the second, an increase in prices. The first phase, between October 1973 and February 1974, was associated mainly with scarcity and the second, beginning in March 1974, reflected the continuing problem of rising prices.

As an outgrowth of the 1973 Arab-Israeli War between October and November 1973, Arab countries comprising the Organization of Arab Petroleum Exporting Countries (OAPEC) decided to ban the exportation of petroleum to the United States and the Netherlands and in the process to reduce the production of petroleum by 25 percent. Although the prime political target of the embargo was the United States, it quickly became evident that Europe and Japan were the

most vulnerable, for the embargo on the United States could generate an energy deficit on the American market of no more than 1.5 percent. [Ref. 3: p. 98] By contrast the reduced production plus the embargo on the Netherlands implied a possible reduction of 12 percent of the energy supply of Europe. Additionally, any shortage in the United States primarily affected transportation, while in Europe the entire industrial sector was threatened.

In October 1973 France and Germany found themselves facing similar challenges which may be categorized as follows:

(1) How to assure oil supplies to their economies in the face of oil production cuts by the Arab rulers.

(2) How to deal with a differentiated embargo that designated some countries as friendly, some as hostile, and others as neutral.

(3) How much to rely on national, European, or Atlantic approaches to meet the crisis.

(4) How to operate and perhaps modify national energy policies and domestic market organizations in the new environment.

The challenges to and approaches taken by France and Germany were somewhat different. The French, because of their attitude toward the Middle East conflict and U.S. foreign policy, were designated by the Arabs as a friendly state and were exempt from supply restrictions. The

Germans under the Brandt-Scheel government were more neutral toward the Middle East conflict and more sympathetic to U.S. foreign policy. As a result the Germans were not subject to an outright embargo, but were subjected to restriction.

The French government, relishing the favored treatment, insisted that all oil companies supplying France implement the Arab policy fully and refused to jeopardize it by acts of economic solidarity with the boycotted Netherlands or political solidarity with the United States. Rather, by diplomatic initiatives in the Middle East, the French hastened to express their desire for a demise of the major international oil companies and for a more conspicuous French place in the world oil structure and world politics.

The West German government on the other hand decried the injustice of being made a target of oil supply restrictions. Appealing to European and Atlantic solidarity, it offered as little offense as possible to the Arabs and looked hopefully to the major oil companies for safeguarding its oil supplies. Thus it can be seen that the French authorities received the Arab challenge by talking and acting as fellow beneficiaries and stimulators of an oil revolution, while the Germans objected to it and hoped to see it reduced to a process of peaceful adaptation.

In the short run the direct impact of the supply restriction on the French and German economies was both

different and similar in various respects. In both countries the Arab oil supply restrictions interrupted the past trend of rising net oil imports and domestic oil consumption. Consumption likewise began to fall from the preceding year's levels. These effects appeared most distinctly in Germany. During the embargo time--which in terms of supply effects on importers and consumers may be equated roughly with the first half of 1974--Germany's net oil imports from all sources ran 11 percent and its oil consumption 14 percent below the year before. For France the figures were 3 and 5 percent, respectively. [Ref. 4: p.70] Since the Arab supply curtailments affected about the same proportion (roughly three-quarters) of both countries' oil sources, it is evident that their impact on France was distinctly less.

This effect was mitigated somewhat by the role that the major oil companies played during the embargo. The companies as a group passed on some of the supply curtailment to France and mitigated that which was to hit Germany.

While both France and Germany felt the need to address themselves directly to the oil-producing countries, France was readier to do so. Since the producer governments appeared at last to have gained some control over the international oil companies, the French were ready to assert that safe supplies for France and Europe could be assured only by a policy of cooperation with these

governments, in preference to other international endeavors.

This view inspired France's pro-Arab and anti-American policy during the Middle East war and its diplomatic aftermath, and France's sponsorship of a dialogue between the Arab countries and the EC states. As a result, France (with British help) temporarily made progress in winning its European partners over to a reluctant, basically negative attitude to the U.S. government's invitation to demonstrate some consumer solidarity on such occasions as the Washington conference in February 1974. While the Germans and others welcomed the U.S. invitation, they also joined in a declaration of the EC's Council of Ministers that rejected the American proposal to establish an international task force of senior officials in order to formulate a consumer action program. In the aftermath of failed U.S. initiatives for consumer solidarity both France and Germany turned to bilateral dealings with the Arab states.

France took the lead in the European rush to the Middle Eastern oil fields. The French government and its two principle companies initiated negotiations in Saudi Arabia in an attempt to bypass the ARAMCO partners who in 1973 had furnished 30 million tons of Saudi oil to France. In early January 1974 ELF and CFP contracted with Petromin (a state-owned Saudi oil company) for the delivery of 27.5 million tons of oil over the next three years. [Ref. 4: p. 73]

French arms and industrial exports were negotiated simultaneously. The French then sought a larger government-to-government agreement with Saudi Arabia covering 800 million tons over twenty years or 40 million tons annually, but were unsuccessful in this attempt. The Saudis appeared more eager to be seen, presumably by Americans, in negotiations with the French than to promise them deliveries, and the French were becoming more cautious about prices.

French initiatives in other Middle Eastern countries were even less fruitful in producing preferential long-term bilateral oil agreements, but were nevertheless fruitful in producing French export commitments. In 1974, after Giscard d'Estaing became president, the French emphasis switched to Iran. An agreement that envisaged large French inputs into Iran's industrialization, gas liquification, petrochemical, steel, and transport equipment plants, tankers, and naval vessels, and the supply of five large nuclear power plants together with quantities of enriched uranium was concluded. The Iranians did not commit themselves to supplying specific amounts of oil to France, but vowed to reward the French industrial efforts with supplementary petroleum supplies as far as available.

In addition Iran in June 1974, placed a down payment of \$1 billion to the Banque de France on future French exports, followed by an Iranian loan of another \$1 billion to the French-Italian-Belgian-Spanish uranium enrichment project

of EURODIF. By passing on to Iran 10 percent of the 53 percent share it held, the French commission obtained the wherewithal for the plant construction, while Iran assured itself of future deliveries of enriched uranium and access to coveted nuclear technology. [Ref. 4: p. 73]

The German approach to the producer countries during the embargo crisis began where the French had ended, in Iran. The Germans sought to form an industrial consortium to pursue projects in Iran with a view to developing the flow of crude oil and gas to Germany. The Iranian side, however, turned away from oil export projects and showed a strong desire to enlist German industry in the building of a new large refinery at Bushir on the Persian Gulf, and in a petrochemical development that would utilize oil as a raw material rather than exporting it as a fuel. An agreement was reached to build an oil refinery at Bushir with a 25 million-ton capacity, on behalf of the Iranian National Oil Company (NIOC) and a consortium of five German oil firms with both NIOC and GOC (the German consortium) to share future output equally. Other large projects included the establishment of a petrochemical works, a steel mill, and a diesel engine factory.

In conjunction with these deals a triangular, Federal German Republic-U.S.S.R-Iran, deal under which Iranian gas would be piped into the U.S.S.R., and Soviet gas, additional to that contracted for under previous Soviet-German "pipe

for gas deals" would be piped to West Germany was concluded. [Ref. 4: p. 76]

While the gas project promised to supply Germany with a future energy supply, the yield of the oil project was less predictable. Not only did the Iranians avoid commitments to supply crude oil to German refineries, they limited the export availability of the new refinery's output by demanding a pricing system that would make its products more expensive than the norm. Thus it remained uncertain what contribution the German involvement in Iran's industrial development would eventually make to the security of German oil supplies.

The Germans also found their way to Saudi Arabia. By November 1974, the German government, realizing the need for a major German oil company, had forced the merger of VEBA and Gelsenberg, two companies in which there was public ownership. Accordingly, Germany acquired a relatively large government-owned oil firm with a significant share of the German market. [Ref. 3: p. 97] A large delegation representing this consortium was successful in making a deal with the Saudis providing for a steel mill, a truck assembly plant, and a cement factory in exchange for a crude oil supply commitment for VEBA (12 million tons over the next three years). The price was reported to be more favorable than that which the French had earlier paid. [Ref. 4: p. 77]

In sum, starting out from rather different positions with regard to the principle oil producers, France and Germany were proceeding by the end of 1974 on similar tracks. In government-sponsored bilateral deals with Middle Eastern countries, they were both promising copious deliveries of industrial goods in return for limited and somewhat tenuous promises of direct access to oil and gas supplies, none of which were embargo proof.

The economic impact of the cut-back in Arab oil imports followed a different path in West Germany and France, but tended to terminate at roughly the same point. Consistent with their respective economic traditions, the French government fixed prices and the Germans avoided doing so but encouraged price restraint on the part of domestic refiners. The great initial price increases for petroleum product imports that resulted from German price liberalization gradually dropped back, while France's fixed prices moved up step-by-step through 1974.

These efforts to cope both economically and politically with the reduced volume of oil were further complicated by the increase in price which rose from \$3.011 per barrel of Saudi marker crude in October 1973 to \$11.651 per barrel by December 1973. [Ref. 3: p. 283]

As a result of the sudden change in the global energy situation in 1973, both France and West Germany were faced with serious immediate challenges. The manner in

which these challenges were met produced serious strains in relations between Europe as a whole and the United States. Friction was initially created by the refusal of NATO members (except Portugal and briefly, Germany) to allow the U.S. to use their territories to resupply Israel during the October 1973 Arab-Israeli war out of fear of retaliatory cutoffs of oil supplies. The opposition of some nations, especially France, to follow the U.S. lead to present a united oil-consumer negotiating position in the wake of the OPEC price rise did nothing to improve the situation. Other points of contention were the rush by some nations, including France and Germany, to seek bilateral deals with the Arab oil producers and the commencement in June 1975 of a Euro-Arab dialogue without the participation of the U.S.

In summary it can be seen that the 1973 Arab oil embargo brought about major changes in both French and German foreign policies toward the Arab nations and the United States, as well as a change in domestic energy policies. In their efforts to relate to the newly powerful producer countries, France and Germany embarked upon somewhat different paths, which in the end seemed to converge. France began pursuing bilateral oil-for-exports deals, chiefly with Arab countries, and ended up with bilateral economic cooperation agreements with the Arabs and others where little was accomplished to improve French oil

security. Germany became more active as a national factor in the international oil and gas business than it had ever been before. Nevertheless, the initial efforts of Germany with Iran and Saudi Arabia yielded little in the way of additional oil supplies. With regard to gas, Germany increased its reliance on supplies from the Soviet Union in the framework of a tripartite agreement with that country and Iran. The result of all these manoeuvrings immediately following the Arab oil embargo was an increased strain on trans-Atlantic relations and very little improvement in either's energy security.

C. AFTER THE FIRST SHOCK WAVE, 1974-1978

1. Economic Strains

With the supply disruption of the embargo over and oil flowing freely again (but at extravagant prices) the French and Germans faced the problem of finding their bearings in a drastically changed world. Each not only had to deal with the economic strains caused by the price of oil imports, but also with the international relations problems initiated by the oil revolution.

On the economic side both countries were faced with difficult choices due to the variable inflationary and recessionist strains imposed upon their economies. These strains were not solely due to the oil crisis, but high oil prices and supply disturbances certainly contributed to them. The governments of both Germany and France faced

two basic problems since the 1973 oil revolution. First, they had to invest in energy substitution and in energy conservation in order to reduce their external dependence. Second, they had to invest in selected export industries in order to restore the equilibrium of their trade balance in the long term by satisfying the import needs of the oil producing countries. These new investments are inflationary because they are financed by monetary expansion and not from savings. Additionally, higher oil prices require individuals in the consuming country to divert a portion of their spending power that was previously allotted to other goods and services. This in turn has created the choice for governments to either allow the consumption of those goods and services to fall, which creates unemployment, or to artificially increase purchasing power in the form of higher nominal wages, thus leading to cost inflation. In other words, the government can either accept a lower economic growth rate with the potential for increased unemployment or push for continues growth with cost inflation.

It is not within the scope of this paper to delve deeply into the economic history of France and Germany during the period for 1973-1979. However, several statistics are useful in gaining a feeling for the effect that high oil import prices have contributed to the economies of these two countries. Both countries followed the trend

among industrial countries concerning annual growth of gross national product (GNP). West Germany in the period from 1971-1973 experienced a growth of GNP of 3.9. This was in contrast to the 1961-1965 average of 5.1 and the 1966-1970 average of 4.7. West Germany's GNP further deteriorated into virtual stagnation during the global recession of 1974-1975 registering GNP growth of 0.5 and -2.1 for these years. As part of a world-wide recession recovery in 1976 Germany produced a growth of 5.6 followed by a 2.8 figure in 1977. This figure improved to 3.5 and 4.3 in 1978 and 1979 respectively. [Ref. 6: p. 128]

In France the trend was somewhat different. The pre-embargo periods of 1961-1965 and 1965-1970, yielded annual growth of 5.8 each period followed by a 5.6 figure for 1971-1973 and 3.2 a year later. The bottom was reached in 1975 with a 0.2 growth followed by a recovery of 4.9 in 1976. In 1977, France's GNP dipped to 2.8 and was followed by figures of 3.3 and 3.0 in 1978 and 1979, respectively. [Ref. 6: p. 128]

As these figures indicate, France entered the post-oil revolution of 1973 period sustaining higher rates of growth than West Germany. France was able to continue this trend through the 1974-1975 global recession but by 1978-1979, West Germany had moved ahead. During this period from 1969-1978, the unemployment rate in France and West Germany grew at an average annual rate of 14.7 and 21.0, respectively.

[Ref. 7: p. 37] In France unemployment reached around 6½ percent by 1979 [Ref. 8: p. 78] and in West Germany the figure was close to 5 percent. [Ref. 9: p. 48] These unemployment figures would not engender a great deal of sympathy in the U.S., but in both France and West Germany, there is alarm at the rate of increase of these numbers. When one considers that during the 1958-1968 period unemployment rose by an annual average rate of 8.8 percent in France and fell at an 8.4 percent rate in West Germany, the alarm is understandable. [Ref. 7: p. 37]

These figures on unemployment and growth of GNP provide a general indication of the direction that France and West Germany's economies moved in during the 1973-1979 period. The price of oil, albeit an important factor in these economic trends was not the only one, but nevertheless the price and availability of oil imports remained high on government leaders' priorities because of national security reasons. For this reason both France and West Germany took important steps in the post embargo period to limit their dependence on Arab oil.

2. Efforts to Deal With the Energy Crisis

Beginning in 1974, both France and West Germany began programs to reduce their energy dependence on oil imports through a variety of methods to both decrease the demand for external oil and increase the availability of domestic energy sources. The demand-side measures included the use of price

controls and conservation while the supply-side measures included the search for new oil and gas reserves, expanded production of known hydrocarbon reserves, and more rapid development of alternative energy sources--especially nuclear power.

a. Demand Side Measures

In the fall of 1973 the German government published its first general energy program, (see table 1.). It predicted that German primary energy consumption for 1985 would be 61 percent higher than in 1973 (an annual GNP growth rate of 4 percent) to which oil would contribute 54 percent or about the same percentage as in 1973. The contribution of bituminous coals was expected to shrink from 22 percent to 8 percent with natural gas increasing greatly from 10 to 15 percent. Nuclear power was to increase from 1 percent in 1973 to 15 percent in 1985.

One year later German predictions looked quite different, (see table 1.) The rise in energy consumption was scaled down to 46 percent above the 1973 figure and oil's contribution was reduced 10 percent. Coal's contribution was increased greatly and gas was augmented further. The expectations for nuclear energy remained the same.

The French outlook for the future went through several evolutions and finally emerged in final form in 1975, (see table 2.) It resembled the German evolution

somewhat in that earlier predictions for oil were drastically scaled back, from 63 percent to 40 percent and the total expected increase in energy consumption from 1973-1985 was dropped from the original 61 percent to as little as 36 percent. As with Germany, the expectations for coal and gas were revised upward, but in France the role assigned to nuclear power was greatly increased. Together with other primary electricity sources (hydropower chiefly), nuclear energy was expected to contribute 30 percent of total French energy by 1985.

Both France and West Germany pursued a variety of methods to meet the previously mentioned goals; among them were the demand-side measures, or those designed to reduce domestic consumption of energy. France was one of the first industrialized nations to take energy conservation seriously. The Agence pour les Economies d'Energie (Energy Conservation Agency) was established in November 1974, and from the beginning aimed at reducing the long-term growth of energy demand. Among the many measures introduced since 1973, are the following: a special tax on the excess consumption of fuel oil, demonstrations and subsidies for new techniques, energy conservation awareness campaigns, interest rebates on loans for energy savings investment, temperature restriction for buildings (20°C) with fines for offenders, and rules on thermal insulation and ventilation. In general France prices energy products

at levels which would correspond to the world market price, and gasoline is heavily taxed. These measures also aided France's effort to reduce consumption. From 1973-1975, France was able to reduce consumption of primary energy by 8.5 percent. [Ref. 10:p.181] However, the period from 1973-1976, only showed a reduction of 3.1 percent. This would indicate that most of the savings were a result of the slow-down in GNP growth, rather than energy conservation measures.

In Germany until 1977, the government was reluctant to intervene in specific end-use sectors, but tended to rely exclusively on the price mechanism of the market. The increasing difficulties encountered in implementing Germany's nuclear program changed this view somewhat. In March 1977, the government issued a statement on energy targets that increased the role of energy conservation and set targets for energy consumption. From 1960 to 1973 energy demand grew at about the same rate as GNP, but the government now expects this to change; from 1977 to 1985 they expect energy demand growth to be 90 percent of GNP growth. [Ref. 10: p.182]

Germany, like France, has mandated energy conservation measures such as public awareness campaigns, financial incentives for conservation, grants and subsidies for more efficient energy use, and progressive vehicle tax by weight. But like most European countries, Germany has

avoided a speed limit. The results in Germany have been similar to France; 1973-1975 produced a decrease in energy consumption of 8.4 percent and the period 1973-1976 showed a 2.0 percent decrease--again indicating that slower economic growth has had more impact than conservation measures.

b. Supply-Side Measures

One of the distinctive features of German energy policy since the 1973 crisis has been the stepped-up effort by the Federal Republic government to implement the 1973 Energy Program objective of creating a strong German mineral oil group which can join in international cooperation especially with the oil-producing countries as an equal partner. As previously mentioned, this was accomplished by the merger of Veba and Glesenberg to form a joint company. The rationale for this venture was to create a German national oil company to broaden the country's crude oil base.

As the largest consumer of oil in Europe, Germany has a particular interest in joining the worldwide search for oil. The chosen instrument for the FRG in this field is called Deminex, which has been carrying out test drilling in the British North Sea, Nigeria, North Africa, the Caribbean, Peru, Canada, and the Middle East.

The results of these efforts by 1979 were less than encouraging. Referring to table 3., it can be

seen that by 1979 German crude oil production was less than 2 percent of primary energy consumption. Additionally, it can be seen that crude oil consumption comprised 52 percent of Germany's total energy consumption. Recalling the 1975 government projection for 1985, which envisioned a 44 percent share of oil in Germany's total consumption and that in 1973 oil's share was 55 percent, it can be seen that not much progress had been made by 1979 in reducing the proportion of crude oil in Germany's total energy consumption.

France had no sizeable reserves of fossil fuels, and its production of oil is negligible (about 1 percent of total energy consumption by 1979). Referring to table 3., it can be seen that in 1979 crude oil consumption in France comprised about 61 percent of the total primary energy consumption. Comparing this to the 1975 target for 1985 of 40 percent it can be seen that France has a long way to go in reaching its 1985 target. In addition, France actually imports close to 70 percent of the oil that it uses both for domestic consumption and for the re-export of refined petroleum products.

Ever since 1973, when the importance of Germany's coal reserves became strikingly apparent, the Federal government sought to apply an optimum policy toward Germany's coal reserves. The extent to which Germany leaned on her coal stocks at the height of the 1973 crisis can be seen in the decline on coal stocks from 19 million

tons in September 1973 to slightly below 5 million tons a year later. [Ref. 11: p.76] West Germany has significant coal reserves; however, the balance between the need to maintain a coal industry at home and the costs of maintaining such a structure are a problem. Although the EEC provides subsidies for member nations coal, the price of European coal is between \$45 and \$90 per ton as compared to the world market price of \$30 or less per ton. [Ref. 12: p.41] Therefore, German coal, principally due to unfavorable geological conditions is hard pressed to compete with American and Polish coal. Nevertheless, German domestic production of coal in 1979 comprised about 30 percent of total primary energy consumption. This compares to the 21 percent figure of both bituminous and lignite projected in the 1974 forecast for 1985. If West Germany has an ace in the hole in the energy situation, it is the ample reserves of coal. As was mentioned, it is not as economical as other nation's coal, but is is nevertheless available.

France's coal is deep, expensive, and scarce. In 1979, France's production of domestic coal accounted for only 6 percent of its total primary energy consumption. This compares with the 1974 projection for 1985 of 13 percent (domestic and imported). Therefore, France is forced to import coal and has created a state-owned coal board, Charbonnages de France (CdF) into the mining equivalent of an international oil company, to buy

mines abroad and secure complete control of coal imports. CdF prospects for coal around the world in joint ventures with big French industrial groups and has taken a stake in mines in West Virginia and Australia and expects to start prospecting in Canada, Columbia, Algeria, and China. The ultimate aim is not only to supply the French market with "French-owned" coal, whatever its source, but to carve out a position as a supplier on the rapidly growing world market.

After mineral oil and hard coal, natural gas is the third largest source of primary energy in Germany. The German natural gas market until 1979 had been met about equally by foreign and domestic sources. Among the most politically significant developments since 1973 in Germany's natural gas market has been the addition of the Soviet Union to the Netherlands as one of the two major foreign suppliers, followed by Norwegian natural gas in 1976. By 1979 Germany was importing 16 percent of its natural gas requirements from the Soviet Union, 35 percent was produced domestically, 37 percent came from Holland, and 12 percent from the Norwegian North Sea. [Ref. 13: p.6] Comparing the natural gas share, domestic and imported, of around 16 percent in Germany's total energy consumption for 1979 to the projected figures for 1985 of 18 percent the Germans seem to be on track in this area, although it is difficult to see how dependence on the Soviet Union is any more advantageous than other sources.

France's position with respect to natural gas is similar to oil; domestic production is almost negligible accounting for some 3 percent of total energy consumption. The 1975 projection for 1985 envisioned natural gas as comprising 16 percent of France's total energy needs, therefore France has pursued an active import policy including a number of import contracts with Algeria, the Netherlands, the Soviet Union, and Norway.

After 1973 many European countries turned their eyes to the nuclear option with much the same results--vastly overambitious plans were continually scaled back, and Germany was no exception. The German government's 1974 projection for 1985 envisaged a 15 percent nuclear energy component of total energy consumption. By 1979, nuclear energy was contributing only 4 percent of the domestic primary energy consumption. The difference between nuclear hopes and reality is related to slower economic growth and to anti-nuclear protests.

By mid-1977, there were eight nuclear plants in the German market whose construction was being blocked by legal protests and in November 1977, the ruling Social Democrat Party bowed to anti-nuclear forces and decided not to build more nuclear stations until coal-fired stations fueled by indigenous coal supplies could no longer be maintained. [Ref. 1: p. 129] The government has an equally tough problem with the storage of atomic wastes where the

subterranean salt dome structures of Lower Saxony presently constitute the only advisable long-term storage location, but the constituents of the area are opposed to its use.

Nevertheless the West German Chancellor, Helmut Schmidt, and the minister of economics, Count Lambsdorff, are powerful advocates of nuclear energy and argue that the future of Germany's nuclear program, which already has been cut back, depends upon solving the problem of atomic waste storage. Therefore the plans for reprocessing plants are doubly important because they also reduce German dependence on imported uranium. But regardless of how the present nuclear debate is resolved, the German program is well behind projected goals.

France has had a rapidly growing nuclear energy program, the most ambitious in Europe. In 1973, nuclear energy accounted for almost 2 percent of total primary energy consumption and for 8 percent of electrical production. Forecasts for 1985 envisaged nuclear energy to 23.7 percent of total primary energy consumption and to 72 percent of electricity production. [Ref. 2: p.58] By 1979, nuclear energy was contributing only 4.5 percent of France's primary energy consumption.

Unlike West Germany, France continued to emphasize nuclear power rather than freeze it due to environmentalist pressure. The major industrial group engaged in France's first nuclear ventures was a company

called Framatone which was controlled by a Belgium group to 51 percent and by Westinghouse with a 45 percent share. Following negotiations in 1975 sponsored by the French government, the Commissariat à l'Energie Atomique (CEA) purchased 30 percent of Framatone from Westinghouse which will remain a junior partner until 1982. [Ref. 2:p. 59]

In the field of advanced reactors, CEA has devoted most of its research and development activities to breeder reactors. CEA has also been active in providing resources and technology for all phases of reactor fuel cycles and has already built a vast industrial complex covering prospecting, mining, enrichment, production of fuel elements, and reprocessing. Prospecting and production of uranium ore have been launched not only in metropolitan France but also in two French-speaking African states, Niger and Gabon. The companies under CEA's supervision control about 15 percent of the natural uranium world market. In addition CEA also promoted Eurodif, a large uranium enrichment plant which began operation in 1978. The publicly owned Eurodif had as its original partners France, through CEA, with 52.8 percent, Belgium and Spain with 11 percent each, and Italy with 25.2 percent. In 1973 Iran became a partner with 10 percent share. The objective of Eurodif was to make West Europe independent of U.S. enriched uranium deliveries, which were soon to become in short supply because of enlarged U.S. nuclear programs.

In summary, nuclear power has immense future potential both in France and Germany and progress was made during the 1973-1979 period to advance the share of nuclear energy in the total French and German markets. France and Germany have even pooled their resources in the research field of advanced reactors. Nevertheless, due to a general anti-nuclear feeling in Europe and especially in Germany, progress has slowed, especially nuclear plant construction.

France has exhibited widespread interest in alternative sources of energy ranging from tidal power, solar power, geothermal power, to biomass power and hydroelectric power. Like most industrialized countries, in France hydroelectric power potential is almost exploited at its maximum potential, whereas the technology for exploiting geothermal power still remains to be developed. By 1979, however, France relied on hydroelectric power for some 8 percent of total primary energy consumption.

Solar energy is another prospect for France, especially in the Southern regions with Mediterranean weather, but here again the technologies that would allow more widespread use are not commercially available at economic prices.

Only about 20 places in the world have the right combination of tidal range and geography to make a tidal power scheme at all practicable and only two

full-scale modern tidal power plants have been built, one in France and the other in the Soviet Union, but the capital costs of tidal power are still considerably higher than conventional hydroelectric power.

France has been the most aggressive European country in pursuing biomass potential for energy, having launched a government-backed alternative fuels program. The goal is to substitute biomass and synthetically-derived methanol for 25 percent (some optimists say 50 percent) of gasoline usage and reduce oil imports to about 70 million tons a year by 1990, [Ref. 14: p. 18] a figure which represents about half of what France imports today.

In short, France has pursued a government directed effort to develop other sources of energy but the rewards appear to be far off in the future.

Germany, like France, has exhibited interest in alternative fuels, but unlike France does not have the potential for extensive tidal or solar power. In 1979 Germany relied on hydroelectric power for less than 2 percent of total primary energy requirements but this figure represents a large proportion of the potential in this area.

Germany is somewhat behind France in the exploitation of biomass potential, but has developed the use of a fuel mixture containing 6 percent methanol. In

addition, Germany has been in the forefront of efforts to produce oil from coal through coal liquification and gasification. Of the five most promising processes for coal gasification only one, the West German, Lurgi process, has been commercialized and then only in Europe, but like most alternative fuels, the development of coal gasification entails numerous engineering problems and substantial costs and doesn't promise to be a near term solution for Germany's energy problem.

3. International Cooperation After 1973

As was previously discussed in the immediate aftermath of the Arab oil embargo in 1973, many countries, including France and Germany, tried to secure their supplies of Middle Eastern crude by direct government-to-government deals or by politically distancing themselves from the United States and the Israeli cause. However, it slowly became clear that the advantages of such deals were relatively small compared to the disadvantages. By 1977, this particular strategy had become measured. The emphasis moved away from direct intergovernment deals for oil toward more general forms of cooperation with the oil-producing world. It was during this phase that the EC brushed aside U.S. opposition and opened a formal dialogue with the Arab world, (the "Euro-Arab dialogue").

However, parallel to this second phase a third, more defensive strategy developed among the Organization

for Economic Cooperation and Development (OECD) nations. This particular strand of energy policy was built around the International Energy Agency (IEA), which sprang from a United States initiative and was created in 1974. It is now part of the OECD and counts among its members all the OECD nations except France. The IEA's initial goal was to help the OECD world avoid (in any future disruption of oil supplies) the muddle and panic of 1973. To this end the IEA members set goals for the increase of their stockpiles (90 day reserve by 1979) and created an emergency allocation scheme, which is triggered automatically if a 7 percent shortage of world supplies is created.

The emergency allocation scheme presented a problem since the French had opted out of the IEA, feeling that it was too concerned with confronting the oil producers and subject to U.S. dominance. The French instead pushed for a scheme run by the EC in Brussels. After a certain amount of intra-European haggling in late 1977, the EC produced its own scheme which was designed to be compatible with the IEA's version, but went a step further by including fuels other than oil in its calculations.

In spite of these gains, intra-European and EC-U.S. rivalries continued to plague OECD efforts for consumer cooperation during the 1970s. In Europe the original opposition of France to the cooperation of oil-consuming countries under U.S. leadership, France's preference that

other European countries (especially Germany) align or, "harmonize" their energy policies with France, and the high priority that France placed on political and economic co-operation with Arab countries tended to limit European co-operation. Germany, especially having been more consumer/cooperation minded than France and more concerned about the performance of the Common Market as a free trade area for petroleum products, did not move in the direction where France stood.

Another cause of friction within Europe was the degree of exploitation of the promising North Sea reserves of oil and gas. For example, Norway cannot consume all the oil that can be produced from its sectors of the North Sea, but an unresolved debate within Norway is whether to develop these reserves at the maximum feasible rate or develop the resources more slowly. Great Britain has also been singled out for criticism by EC members for its alleged me-first policies.

EC-U.S. cooperation has also been following a rocky path mostly concerning import targets and long-terms strategies for oil savings. The U.S., through the IEA, consistently pushed for plans entailing specific import targets by state. The EC preferred to maintain an overall European target of reducing dependence on foreign oil from 63 percent to 50 percent of total energy use by 1985.

[Ref. 15: p.43] Additionally, Europe continued to single

out the U.S. as irresponsible on import policy and conservation. The U.S. pointed out that European progress toward their 1985 goal was attributable more to increased North Sea production than self-sacrifice.

4. Summary of French and German Progress From 1973-1979

In France total primary energy consumption rose by 4.7 percent from 1973 to 1979 while domestic primary energy production rose about 12.2 percent. During this period crude oil consumption remained relatively constant and crude oil consumption as a percentage of total primary energy consumption fell from 65.7 percent in 1973 to 61.2 percent in 1979, leaving quite a way to go to meet earlier goals of 40 percent by 1985.

The change in volume of France's crude oil imports was almost negligible from 1973-1979, having increased from 2,709 thousand barrels per day to 2,762 thousand barrels per day. However, the pattern of France's major suppliers changed somewhat. The percentage from Arab OPEC fell from 76.3 percent in 1973 to 70.8 percent in 1979. Supplies from OPEC as a whole fell from 96.7 percent in 1973 to 85.5 percent in 1979. Neither of these figures would be a cause for optimism.

There were some large changes in France's supply relationships. A drop in Algerian imports from 8.2 percent of France's total to 3.7 percent was matched by an increased dependence on Iraqi oil from 13.8 to 17.7 percent of

total imports. Similarly, the share supplied by Kuwait dropped from 11.5 percent to 3.5 percent while Saudi Arabia's share climbed to an impressive 32.3 percent of France's total imports of oil. During 1979 Iran and Iraq together accounted for 22.7 percent of France's total oil imports.

In Germany total primary energy consumption rose 2.8 percent from 1973-1979 while primary energy production fell 1 percent. Crude oil consumption remained relatively constant dropping from 2.985 thousand barrels per day in 1973 to 2,901 thousand barrels per day in 1979. Crude oil consumption as a percentage of total energy consumption dropped from 55.4 percent in 1973 to 52.3 percent in 1979 which puts Germany in a slightly better position than France concerning earlier projections of a 44 percent goal. However, Germany's crude oil imports rose 35.6 percent during the period from 2,192 to 2,292 thousand barrels per day.

The pattern of West German imports shifted significantly from 1973. Dependence on Arab OPEC oil dropped from 71.9 percent in 1973 to 40.6 percent in 1979. Dependence on OPEC as a whole dropped from 97.1 percent to 59.5 percent. The largest inputs to this change resulted from a fall in Algeria's share of German oil imports from 12.2 percent to 6.6 percent, Saudi Arabia's share decrease from 22.8 percent to 12 percent and Libya's drop from 23.6 percent to 12 percent. However, the Soviet Union's share of West

German oil imports rose to 6 percent by 1979 and Iran and Iraq together contributed 9.3 percent to Germany's total in 1979.

D. THE SECOND SHOCK WAVE, 1979-1980

Until the end of 1978, the prospect of a new energy crisis occurring in the next decade appeared to be receding. Studies of world energy supply and demand had painted a more optimistic picture than those that had emerged immediately after the 1973 crisis. Energy consumption had grown at a much slower pace than what was thought possible several years earlier and new sources of crude oil, in the North Sea, Alaska, and Mexico, had temporarily eased reliance on OPEC. It was generally predicted that fuel prices would remain almost constant in real terms for the next several years.

That picture was changed by the upheaval in Iran and an associated hardening of attitudes by other members of OPEC. For a time Iran's petroleum industry was virtually shut down and the world's oil supply system was robbed of some 5.5 million barrels a day. [Ref. 16:p.154] That shortfall, amounting to over 10 percent of non-communist world oil consumption, was greater than the combined production of the North Sea, Mexico, and Alaska, the non-OPEC producing areas which had helped provide a supply cushion in recent years.

The impact of the events in Iran would have been much more pronounced in the industrialized world had not two events helped alleviate the short-term effects of the oil shortfall. First, global oil stocks were at a record level. In addition to the seasonal buildup that occurs in the fourth quarter of the year, the international oil companies had made additional purchases in anticipation of another price rise being levied at the December 1978 OPEC meeting. Second, as the magnitude of the crisis became apparent, Saudi Arabia allowed the ARAMCO consortium to raise production to 10.5 million barrels per day (MMBD) which was two MMBD above Saudi Arabia's self-imposed average annual production ceiling of 8.5 MMBD. [Ref. 17:p. 28] Saudi efforts to balance global oil supply/demand were aided by Kuwait, Venezuela, and Nigeria, all of which raised production.

The geopolitical situation affecting access to oil became more desperate during the summer and fall of 1979. The deteriorating political situation in Iran, the November seizure of the American embassy in Teheran, and the December Soviet intervention in Afghanistan led to an even greater escalation in the price of oil. By the end of 1979 most OPEC crude prices were near \$25-\$30/barrel. When premiums and other production "incentive" differentials were added to the official OPEC base prices, the real price of many OPEC crudes hovered between \$30-\$32 per barrel with spot prices near \$40/ barrel. [Ref. 17: p. 37] As OPEC

prices escalated, most non-OPEC producers raised their prices in tandem.

The war between Iraq and Iran that began on September 22, 1980, was the third event that comprised the second shock wave, resulting in widespread destruction of both countries' oil installations and stoppage of their crude and refined exports. On the eve of the war, Iran's output was already drastically curtailed, but Iraq had been a major Western, particularly European, supplier.

These three events, the political instability in Iran, the Soviet invasion of Afghanistan, and the Iran-Iraq war portended a situation similar to the first shock wave in 1973, but this time there were some major differences for the West in general and Europe in particular. First, by late 1978 the international petroleum market was very different than it had been prior to the 1973 OPEC oil embargo. Until the eve of the 1973 embargo, United States oil import dependence had been held at reasonable levels, implying that the U.S. would not be a major claimant on world oil in a supply emergency. After 1973, however, skyrocketing demand in the U.S. and the continued decline of domestic U.S. production raised U.S. oil-import dependence from 23 percent in 1973 to almost 50 percent by the end of 1978. [Ref. 17: p.28] During this period, as was previously discussed, France and Germany had made little progress toward decreasing their oil import dependence. As a result

by 1978, Europe and the U.S. (not to mention Japan) were in much greater competition for world oil supplies. But whereas France and Germany were dependent on Arab OPEC for 70 percent and 40 percent of their imports, respectively, the United States only received 30 percent of its oil imports from the region. This difference in dependence held open the possibility that the U.S. would not adopt politico-military policies in the region compatible to French and German vital interests.

A second fundamental difference from 1973 was that the major international oil companies who had helped mitigate the 1973 effects on Germany, had witnessed an erosion of their guaranteed access to Middle Eastern oil supplies. Whereas in 1969, the major oil companies had a near stranglehold on the international oil business, by 1979 these same companies extracted only about 45 percent of OPEC crude. This declining control of crude oil by the majors raised serious questions of whether the industry advisory board in the International Energy Agency (IEA) would have sufficient flexibility to allocate crude oil supplies in the event of a major supply emergency and the activation of the IEA oil-sharing mechanism.

A third difference from 1973 is the uncertainty concerning Soviet interests and designs in the Middle East especially after the invasion of Afghanistan. Should the Soviets seek to exert themselves as a major claimant on

Middle Eastern oil in the near future, the political, military, and economic ramifications would be ominous, especially for Europe.

Finally, as has become apparent by 1979, the global petroleum market no longer seems to be determined by economic factors alone. The industrialized world can no longer afford to disregard the vital interests of the major oil producers. The attitude of the OPEC countries remains crucial to the supply and demand balance. In this regard Saudi Arabia is particularly important; it is uncertain how long the Saudis will continue to increase production to alleviate global shortfalls particularly when this is not in their economic interest.

The effects of the second shock wave were different for France and Germany. France, in terms of sheer volume, suffered the greatest loss among the consumers. Since 1973, France had continued to increase dependence on Iraq for imports, reaching 560,000 MMBD at the time of the Iran-Iraq war which was equivalent to 24 percent of France's oil consumption. [Ref. 18: p.40] Germany being less dependent on Iran and Iraq remained more optimistic because of large stockpiles which had previously been built up, but the loss of Iranian supplies made it impossible to build stocks for the approaching winter season. Both countries benefited from the temporary glut in the global market which existed during that timeframe, but each had to face renewed

economic strains resulting from the price increases. As in the aftermath of the 1973 crisis, both countries joined the rest of the industrialized world in renewed efforts to strengthen their security. Two of these efforts, the new search for consumer cooperation epitomized by the Tokyo Summit and efforts to further diversify energy supplies (characterized by the negotiations for Soviet gas) will be discussed below.

1. The Tokyo Summit

The second shock wave of 1979/80 produced renewed incentives for Europeans and Americans alike to add impetus to the international consumer programs that had produced few results since 1973. Thus within the EEC and IEA new programs were pushed and previous ones reevaluated.

Within the EEC, two formal commitments on energy-saving had previously been made: to reduce dependence on imports from 57 percent in 1978 to 50 percent by 1985 and to keep oil imports in 1985 to the level of 1978. These declarations were used by the EC as a means to pressure the U.S to take actions to cut U.S. imports by the end of 1978. [Ref. 15: p. 43] Before this deadline arrived, however, the Iranian crisis arose to add considerable urgency to the oil import problem and inadvertently took the Americans off the hook. By late February 1979, IEA officials began to talk of plans to lower import use on an emergency basis. In March the IEA members agreed

that during 1979, they would cut total energy demand roughly 5 percent per nation. This hurriedly conceived plan soon turned out to be unworkable. Members supplied lists of crash conservation measures to the IEA, but countries like Japan and Germany clearly were not prepared to carry out programs that would seriously threaten economic growth.

Nevertheless most countries eventually showed import reductions of 3 to 5 percent and the United States cut oil use a dramatic 8 percent during 1979. [Ref. 15: p.43] During March 1979, the EC had also revised its energy targets to conform to the IEA pledges. But by late June, at a summit in Strasbourg, the increasingly pessimistic situation had forced the EC to stiffen their targets by promising that each year between 1980 and 1985, community oil imports would not exceed the 1978 level. France had pushed for country-by-country goals, but the other EC members were not ready for this step.

A week later the seven nation Tokyo Summit was held with the participants including the United States, Japan, Canada, and EC members Great Britain, West Germany, France and Italy. Under intense pressure from France and the U.S., the "Big Seven" agreed to accept country-by-country import targets for 1985 and it was understood that based on this foundation the other IEA and EC countries would do likewise. However the actual targets accepted by each of the Big Seven caused problems; each wanted to use a

base year that best suited its own interests. The U.S. used 1977 when its imports were highest, the EC used 1978.

In September 1979, the EC sought to parcel out portions of their global import ceiling to each member country and a fight immediately developed over treatment of North Sea oil. Britain maintained that other EC countries should treat this as an import, but the rest led by Germany argued that North Sea oil should not be part of the quotas and the British gave in.

Thus, in contrast to post-1973 events, some progress has been made by the industrial countries to limit imports but serious difficulties still remain in the arena of cooperation. For example, the IEA emergency sharing plan has never been used and the results of its implementation are uncertain. U.S. officials calculate that under the IEA plan the U.S. would have to give up about 300,000 barrels per day of imports which would be allocated to other IEA members. This on top of losses from disruptions of normal U.S. supply could cause a serious supply situation in the U.S.

In addition, immediately after the Tokyo Summit in June, the Strategy Committee of OPEC met in London with top EC representatives to discuss the Europeans' long-term demand for oil and the Arabs' views on its availability, thus reviving memories of the Euro-Arab dialogue after 1973 and giving rise to U.S. speculations of a new special oil

bargain between the EC and OPEC. Urged on by France and Kuwait, the EC and six of the oil producers on the Persian Gulf proceeded to conduct negotiations to establish a special relationship that envisaged long term guaranteed oil supplies for Europe and access to Europe's markets, technology, and possible military assistance for the Arabs. OPEC's president later stated publicly that the talks, "should not be limited to energy problems alone, but should include political and economic areas of common interest." [Ref. 19: p.19]

Both Arabs and Europeans believe there is much to be gained economically and politically from lessening their dependence on the U.S. and its oil companies. The Europeans have long argued that the industrialized countries' economic problems, particularly inflation and the turmoil in foreign exchange and financial markets, are largely rooted in the lack of an effective U.S. energy policy. The dollar's decline, which severely cut into OPEC income, combined with alleged U.S. oil gluttony, has been blamed for the 60 percent run up in oil prices in Europe that fueled inflation and contributed to recession. Another strong bargaining chip for Europe is that under the European Monetary System (EMS), dominated by the German mark, more and more European currencies have become attractive alternative investments for Arabs anxious to diversify out of the dollar.

In short, the second shock wave was instrumental in forcing Euro-American cooperation on the important issue of import restraint but also had an unsavory effect for the U.S. as well--the bilateral deals that characterized the European search for oil security after 1963 were replaced by a more formidable united EC approach in 1979.

2. The Yamal Gas Deal

As in the post-1973 crisis era, the French and Germans after 1979 attempted to further diversify their source of their energy imports, but this time the proposed plans included the controversial issue of greater dependence on the Soviet Union as a natural gas supplier through the Yamal pipeline deal. The Western European nations, led by the Federal Republic of Germany, have completed negotiations to import extensive new gas supplies from the Yamal Peninsula in Western Siberia. The proposed project will develop frontier Yamal fields and build a pipeline to bring 40 BCM (billion cubic meters) of gas per year to Western Europe before the end of the century. At least 12 BCM per year will go to Germany and eight to France; the rest will be available to Italy, Holland, Spain, Austria, Belgium, and Sweden. The cost of the project to Western Europe, mainly for construction of up to 3,600 miles of pipeline will be between \$10 and \$15 billion. Financing will be undertaken by the Western European countries involved and Japan at low, subsidized rates. [Ref. 20:p. 209]

The project will bring the Soviet share of Germany's gas imports to almost 30 percent and the share of Soviet gas in Germany's overall needs to about 5 percent. For France, this will more than double current French gas imports from the Soviets to 25 percent of France's natural gas supplies, and raise French dependence on Soviet gas to 4 percent of its total energy needs. [Ref. 21:p. 40]

West Germany, because of its leading role in the pipeline arrangements, is the crucial customer and constructor. In addition to needed gas supplies German companies are the prime contractors for most of the pipe and construction contracts and German banks are in the forefront of the financing.

Prior to completion of the deal, the U.S. warned Germany, France, and other potential European buyers of the gas that such purchase would make Western Europe, particularly the FRG, dangerously dependent on Soviet supplies. Since natural gas is used in key German industries, like steel and chemical, and is not readily replaceable when supplies are curtailed, the supply contract will be strategically and politically significant. The U.S. also pointed out that the Soviets curtailed supplies to Western Europe 20 percent during the winter of 1980 when their sources in Iran were cut off. [Ref. 22:p. 20] Washington also objected to the sale because it would give the Soviets much needed hard currency to buy Western technology.

According to Klaus Liesen, German Ruhrgas chairman, the basic price was set in marks and payments for the gas will be only in marks. [Ref. 23: p. 31]

The Europeans in general and West Germany in particular deny that the Yamal deal will place them in a position of dependence on the Soviet Union. The West Germans claim that it is only a diversification of resources and that Germany could make up for any shortage caused by a Soviet cutback with supplies from its own gas fields and with gas supplied under contract from the Netherlands and Norway. It is difficult to predict whether the deal will fulfill West Europe's expectations or prove to be a disaster, but either way it is a significant outcome of European efforts to get OPEC off their backs.

E. SUMMARY AND PROSPECTS FOR THE FUTURE

As has been discussed, the roots of French and West German energy dependence on Persian Gulf oil began with the decline of the indigenous European coal industry and the conversion to cheaper, more accessible oil after World War II. The French and Germans although starting from different energy positions, ended up almost equally vulnerable when the Arab embargo began in 1973. Due to basic foreign policy differences, each reacted differently with respect to the Arab suppliers and the United States, although eventually both felt compelled to negotiate bilateral deals with Persian Gulf states in an effort to improve supply security.

Neither significantly improved their import supply security due to the failure to conclude long-term guaranteed supply deals.

In addition to bilateral deals, both countries tried to restructure their energy situations through conservation measures, diversification of suppliers, increased development of alternative fuels, and long-term energy plans envisioning a rearrangement of the proportion that various energy sources would contribute to the total.

When the second shock wave of oil supply restrictions and price hikes hit in 1979, neither France nor West Germany had significantly altered their position since 1973, although West Germany had reduced its oil dependence on the Arab suppliers. This situation was due in large part to the failure to make progress on earlier, somewhat grandiose, projections on nuclear power production and the slow pace of research and development of various other alternative fuels which had yet to become economically feasible. In addition, efforts to increase cooperation between consumer countries had largely been a failure, due in part to France's policy of intransigence toward the United States.

The second shock wave, like the first, stimulated renewed efforts for international consumer cooperation with a modicum of success. However, the pattern of bilateral Euro-Arab deals shifted to a united European-Arab dialogue. Additionally, France and Germany entered into deals

destined to increase their dependence on the Soviet Union as a supplier, apparently operating on a theory that had previously been disapproved with the Arab suppliers--that increased economic interdependence will somehow protect consumers from supply curtailment. In addition, the second shock wave revealed some stark realities about the present global energy situation; that the U.S. is fast becoming a major rival with Europe and Japan for Persian Gulf oil, that the Soviet Union may in the near future join this rivalry, and that the global petroleum market no longer is driven by economic factors alone--the vital interests of the Persian Gulf and other major producers have to be considered.

The future for France and West Germany within the global energy competition seems unclear. Part of this is attributable to the wide variance among analysts who forecast global energy supplies. Much of the variance can be accounted for because of the following factors:

- (1) varying projections of world and national GNP rates.

- (2) different assumptions about energy demand inelasticities

- (3) conflicting forecasts of total oil and gas reserves available.

(4) varying assumptions about the impact of governmental and environmental policies on the timing of energy resource development.

(5) differences over the rapidity of technological innovation leading to enhanced exploitation of alternative energy.

(6) the attitude of the major oil producers toward continued high rates of production.

It seems clear that the answer to France and Germany's energy problems for the near term (within the next decade) is not various alternative sources such as biomass, solar energy, geothermal, tidal power, etc. unless spectacular oil price increases and/or technological breakthroughs occur. Nuclear energy may produce a mid-term answer although currently construction in France is being cut back by the Mitterrand government and construction in Germany has been frozen.

Both countries will primarily be dependent on coal, gas, and oil for the foreseeable future. In this respect West Germany has an advantage with its expensive but ample coal reserves. Much could also depend on the exploitation of U.S. coal reserves. In the area of oil and natural gas, the North Sea reserves provide an important future alternative for Europe. The Norwegian block in the North Sea contains large reserves of gas, but its exploitation will be difficult and expensive and is complicated by Norway's

policy of economic and environmental conservation. In addition, North Sea oil exploitation has consistently lagged behind expectations due in large part to British protectionist policies. In short, the many alternatives available to France and Germany are each difficult and promise to produce only small amounts of new energy, but in combination their energy security benefits could be significant in the long term. The only alternative other than political and military efforts is to wait complacently for the next shock wave, which like the first two, promises to have the effect of increasing the distance between U.S. policies on one hand, and those of France and West Germany on the other.

III. FRANCE AND THE SECURITY OF THE PERSIAN GULF

In the two years since the invasion of Afghanistan it has become apparent that there is still a great deal of disagreement among the NATO allies on how to best protect the flow of Persian Gulf oil without compromising the defense of Western Europe. However, there is a general consensus that the formal boundaries of NATO's area of responsibility (which stop at the Eastern border of Turkey and at the Tropic of Cancer) should not be extended and that any military measures necessary should be planned and conducted outside the realm of the Atlantic Alliance on a bilateral or multilateral basis. In conjunction with this reasoning two basic methods in which the European allies can aid the United States in contribution to the continued security of Persian Gulf resources have evolved--first, direct contribution of combat and/or support assets earmarked for Persian Gulf contingencies or secondly, by replacing American combat forces presently committed to Europe, thus freeing them for use in the Gulf region.

It is within this context that the role of France becomes important. Although no longer a member of NATO's integrated military structure, France is one of the few West European nations with the capability to militarily influence a situation both in the Persian Gulf and in Europe. For

this reason it is important to resolve some of the ambiguity surrounding the role of France in the dual problem of protecting Gulf oil supplies without compromising the defense of Europe.

Unfortunately forecasting French policy is a difficult task in that its main characteristic seems to be that it is predictable only in its unpredictability. Due to the Gaullist legacy of complete independence in foreign policy and heavy reliance on proportional deterrence in the defense sphere, it is somewhat uncertain how France would react to a Soviet military initiative either in Europe or elsewhere. Nevertheless, the limits of this uncertainty may be changing. The Middle East war of 1973 and the resultant oil crisis it perpetuated, coupled with the mounting tensions in the Horn of Africa where French forces are engaged in maintaining the security of her former territory of the AFARS and ISSAS (Djibouti), as well as continuing local conflicts in Chad, along the borders of the former Spanish Sahara, and in Zaire, dramatize the fact that France's nuclear deterrent cannot safeguard all of her interests or sustain her commitments in many regions of the world outside of Europe. These increasingly demanding commitments may eventually force France to modify her independent stance vis à vis NATO and the United States. This may become the trend in French policies for as France is repeatedly forced to employ scarce military resources outside the framework of her proportional

deterrence strategy her dependence on allies will increase, and her autonomy of decision will decrease. This dilemma was succinctly expressed in a warning from Gaullist General Pierre Gallois when he stated that, "in attempting to do too much, France will fail to do what is essential," (maintain the Gaullist legacy of an independent foreign policy). [Ref 24: p. 75]

In developing this hypothesis it is necessary to analyze French capability to influence situations in Europe and the Persian Gulf, and to make an assessment as to French intentions in these areas.

A. FRENCH CAPABILITIES IN EUROPE AND THE PERSIAN GULF

For purposes of this discussion French capabilities to influence situations in Europe and the Persian Gulf will be categorized as military and political-economic. Although this analysis of French capabilities is arbitrarily divided into the sub-categories of Europe and Persian Gulf, it should be understood that many of the military assets attributed to Europe could readily be employed elsewhere depending upon the choice of the French leadership. Additionally, political and economic assets and liabilities tend to cut across regional divisions. Therefore this discussion will provide a brief overview of the most important military capabilities available to France in general and their applicability to the European theater.

This will be followed by a more detailed analysis of France's intervention capabilities and politico-economic strengths in the Persian Gulf area.

1. Europe

France recognizes that in the present global situation there exist two superpowers and a cluster of middle powers in addition to the third and fourth world, and it is the expressed determination of France to stand at the head of these middle powers. Consequently, she maintains a military force structure commensurate with this goal. In order to maintain this force structure France from 1971-1978 maintained a growth in defense expenditures of 3.17 percent in real terms, a figure in excess of NATO's present goal of 3 percent. This was accomplished during the period of detente when most Western countries failed to attain the 1977 NATO guideline and the United States reflected a growth of -2.69 percent in real terms. [Ref 25:p. 78] France continued to increase defense spending reflecting percentages of 3.25 and 3.26 in 1978 and 1979, respectively, and her goal by 1982 is 3.65 percent. [Ref. 26:p.599]

A heavy proportion of this defense spending (45.5 percent, 1965-1970 and 36.9 percent, 1970-1975) has been used for the development and maintenance of the cornerstone of France's defense--the nuclear deterrent force. [Ref. 27: p.79] As a result France is recognized as having the third leading independent nuclear force in the world behind the

United States and the Soviet Union. The centerpiece of France's strategic nuclear force is the ballistic submarine fleet presently consisting of five strategic submarines and a sixth under construction. These submarines carry 16 strategic missiles each and all but the oldest eventually will be upgraded with the new M-4 SLBM with multiple warheads and increased range. [Ref. 28:p.11] These strategic nuclear submarines will be complemented by nuclear attack submarines in the future, although at present only one is in the fleet and the ultimate number to be built is in question.

The second leg of the French nuclear arsenal is the land-based intermediate range ballistic missile system based at the Albion plateau. This arsenal consists of two groups of nine S-2 strategic missiles, capable of carrying a 150 KT warhead over a distance of 500 to 1,875 nautical miles, which will be upgraded by the S-3 missile with more effective penetration capability and higher megaton power. However, plans to install nine additional IRBMs were dropped in the 1977-82 program-law. [Ref. 26:p.588]

The Air Force component of the strategic nuclear forces is also to be upgraded. The air leg of France's strategic triad has depended on the Mirage IV aircraft capable of carrying nuclear bombs of 70 KT yield with a combat radius of 850 nautical miles without refueling or some 4,300 nautical miles refueled twice. [Ref. 27: p.79] Future plans include intensification of research on a

medium-range air-to-surface missile providing reduced vulnerability for the aircraft during the strike mission.

France also has the capability to deliver tactical nuclear weapons in the European theater using five air force squadrons equipped with the AN-52 tactical nuclear bomb of 10 to 15 KT's, and the Pluton ground-to-ground missiles with a range of 120 Km. [Ref. 27:p.19] Initially, as provided in the 1977-1982 program, six regiments were eventually to be equipped with the Pluton missile, however in the 1977 budget a final decision to abandon long-term plans for a sixth regiment of Pluton missiles was made. [Ref. 16: p.588] In the near future the AN-52 will be replaced by the medium-range ASM in the tactical air force and in the Navy Super Etendard Squadrons which also presently carry the AN-52. Finally, with an eye to preparing for the more distant future, France is currently engaged in the development of the enhanced radiation bomb.

Although there is a great deal of controversy surrounding the merits of France's nuclear arsenal both within and outside of France, its proponents maintain that her independent nuclear force does indeed contribute to the defense of Europe and provides an additional deterrent from the U.S. nuclear guarantee. The main thrust of their argument is that the French capability creates multiple decision centers and additional uncertainty in the mind of a potential aggressor thus adding to the nuclear deterrent

in Europe. The French point to the provision in the Ottawa Declaration of June 1974, in which the value of the French (and British) nuclear deterrent force was officially recognized by her NATO partners. Naturally, if deterrence should fail and nuclear weapons come into use, French nuclear capabilities, which will quadruple by 1982 from a total of 22,000 KT in 1976 [Ref. 26: p.585], will be welcomed by her NATO allies. Finally, the French development of enhanced radiation weapons (ERW) could help deflect some of the political pressure from the United States ERW program and thus contribute to the eventual deployment of a valuable NATO anti-tank weapon.

The conventional forces of France, in view of manpower resources involved, put her in second place in Europe after Germany, but in front of the United Kingdom. Total army-airforce manpower stands about at 430,000 men not including approximately 80,000 gendarmes. Of this total 330,000 men belong to the army and 100,000 serve in the airforce. The army is comprised of eight armoured divisions, three of which are stationed in the Federal Republic of Germany. These are complemented by six infantry divisions and an Alpine division as well as two external intervention units including one parachute division and one "marine" infantry division. The airforce consists of some 450 Mirage III, IV, F-1, Jaguar and Alpha jets, plus 100 transports, mostly Transalls, some of which are configured to carry the

aforementioned tactical nuclear payloads. [Ref. 29: p. 3]

To support the manpower needs of these services France still relies on conscription.

France maintains the finest navy of any continental West European power, and it is one of three navies in the world, in addition to the United States and Soviet navies, which is able to claim a truly world-wide deployment status. Apart from the submarines that form the strategic nuclear force, the existing fleet consists of approximately 130 combat ships and 18 logistical support ships. The largest warships in the French fleet are the two aircraft carriers, Foch and Clemenceau, which are intended to remain on active duty until the late 1990s. These carriers usually include an aircraft complement of 30 strike aircraft and 12 helicopters for submarine chasing or search and rescue operations. In accordance with a command given by President Giscard d'Estaing, the two carriers were transferred from the Atlantic to the Mediterranean underscoring the keen interest felt by Paris for the Mediterranean area. In addition to the Foch and Clemenceau, France maintains a 10,000 ton training carrier, the Jeanne d'Arc, which primarily serves as a training vessel for naval cadets, but it has been outfitted as an operational control ship with a capacity for carrying helicopters and 700 marines. [Ref. 30: p. 105] These craft, primarily Foch and Clemenceau, can be used to support intervention abroad, support amphibious operations in the face of

serious opposition, or secure sea control in limited areas, given their relatively short-range aircraft.

France differs from other European states in her continued interest in naval intervention abroad and her fleet, in addition to the carriers, reflects the desire to maintain this capability. An entire class of frigates was designed as dual-purpose ASW/amphibious assault ships capable among other things of carrying a commando force of 80 men. France possesses two dock landing ships with permanent and temporary helicopter decks, five tank landing ships, and a variety of lesser craft, but none is fast enough to keep up with the combatants. However, French warships can generally carry considerable numbers of commandos; what they lack is the ability to transport heavy equipment such as tanks.

For sea lane protection and sea control the French navy maintains several cruisers, 5 large guided missile destroyers, 11 conventional destroyers, 19 frigates, 22 conventional submarines, and 47 minesweepers, in addition to numerous small combat ships. [Ref. 30: p. 106]

Future improvements as detailed in the naval program revealed in November 1979, envisage a fleet of 112 new warships and 21 supply ships over the next two decades. The combat fleet was to consist of 3 nuclear powered carriers, plus 1 helicopter carrier; 18 anti-submarine corvettes (compared to 13 at present); 9 anti-aircraft

corvettes (currently 7); 18 AVISOS, 10 high speed patrol boats, 40 minesweepers, and 14 attack submarines, 10 of which will be nuclear powered (in place of 22 diesel powered boats). [Ref. 24: p. 72] The nuclear powered helicopter carrier designated PH-75 is intended to compensate for the lack of a heavy transport component to the intervention forces.

It should be borne in mind that the above mentioned goals are part of a long-term plan the entire fulfillment of which is probably doubtful. Nevertheless, the French navy is a European force that has to be reckoned with by the Soviets especially in the Mediterranean where the French government has indicated the primacy of defending France's interests by relocating and stationing her two most formidable surface vessels.

Finally, in addition to the valuable nuclear and conventional assets which France could bring to bear in Europe, her geo-strategic weight must not be forgotten. France's withdrawal from the integrated military structure of NATO had a major impact on the logistic systems and plans of NATO forces. Since the withdrawal of NATO forces from French territory, NATO lines of communication (LOCS) are more vulnerable as they run close to and parallel the NATO/Warsaw Treaty Organization boundary. This factor plus the additional strategic defensive space provided by France increases the military contribution that France could provide in the event of a major crisis in Europe.

This brief summary of military capabilities serves to highlight the fact that France can indeed provide a major contribution to the protection of Western interests in the Persian Gulf area indirectly by relieving her allies, primarily the United States, of some of the burden of the defense of Europe. Without going into detail, in addition to direct military involvement on the continent, these measures could include, but need not be limited to: augmentation of the U.S. sixth fleet in the Mediterranean thus releasing U.S. ships for duty in the Indian Ocean; earmarking civil aviation assets for troop transport from North America to Europe, thus releasing U.S. assets for duty elsewhere; or providing landing and logistic support for U.S. air transport enroute to the Persian Gulf area. These measures would all be helpful in a period of crisis in the Persian Gulf area and could be provided for by low visibility, bilateral contingency agreements.

2. The Persian Gulf Area

a. Military Capabilities

Of importance to the Persian Gulf situation is France's low key but considerable presence in the area, with approximately 5000 troops stationed in Djibouti supported by air transport and helicopters. This is backed up by a powerful European-based Force d'intervention which is designed to protect French foreign interests and can be drawn from an air portable motorized division of Marines

or two-brigade parachute division airlifted in the Air Transport Command's force of over 100 C-160 Transall and Noratlas aircraft. [Ref. 30: p.32]

France continues to keep a significant naval presence in the Western Indian Ocean to guard oil routes. French sea lane control in the area was predicated on using bases at Djibouti and at Diego Suarez in the Malagasy Republic for their ships. However, in 1974, a new government in Malagasy told France to remove all of its forces by 1975. To replace Diego Suarez as a base in the South Indian Ocean, the French have moved their naval forces to Reunion where they have a modern air base, a communication center, a well equipped port, and 3,200 troops including 1,200 paratroopers. They are also present on Mayotte Island in the Comoros group (where they are well located to exert control over the Mozambique Channel) with its good deep water bay and some naval facilities. [Ref. 31: pp.30-41]

Djibouti, strategically located at the entrance to the Red Sea, received its independence from France in June 1977. Within hours the new nation had signed a defense pact permitting the French troops, warships, and aircraft based there to remain. [Ref. 31: p.36] Djibouti continues as the nerve center and principle base for French military and naval presence in the Indian Ocean, which normally consists of 12-18 units depending on the circumstances. The regular French Indian Ocean force includes

a command ship (La Charente--a converted tanker), a destroyer, 4 frigates, 5 patrol, and 3 support ships. Periodic reinforcement in times of acute crisis could include one of the two French aircraft carriers. Additionally, the French deploy maritime patrol aircraft to the area, but in the absence of the carriers lack any permanent tactical air capability. [Ref. 25: p. 55] At present, this French presence does not constitute an overwhelming force, but prior to 1978, France had more naval ship-days of deployment on a yearly basis in the Indian Ocean than either the U.S. or U.S.S.R. [Ref. 31: p. 36]

The French have not been reticent to augment these permanently stationed forces in times of crises. A show of naval strength offshore of Djibouti in 1977 when she was granted independence evidently provided notice of French interests in that state and contributed to Djibouti's neighbors' hands-off policy. The most recent example of these diplomatic signals was the deployment of the Geroges Leygues, the French fleet's best equipped anti-submarine vessel, to augment the Indian Ocean force in February 1980 after the Soviet invasion of Afghanistan. According to naval experts this was part of an effort at that time to stress the importance that France attaches to its naval presence in the Indian Ocean. The Georges Leygues joined elements of the rest of the French fleet in cruising the water of the Persian Gulf, Straits of Hormuz, and Mozambique Channel. [Ref. 32]

The importance of France's military and naval presence in the Indian Ocean area, however limited it may be at any given time, goes beyond the mere presence of firepower in the region. The fact that it is a non-U.S. presence demonstrates allied concern for European interest in the area and lessens and perhaps makes more acceptable the political impact of the presence of U.S. forces in littoral states; and naval presence, the least obtrusive of any combat presence, is the most tolerable form politically for our regional allies such as Saudi Arabia or Oman.

The ideal situation, of course is to establish joint Western cooperation which displays explicit recognition that NATO Western interests are direct enough to risk combat in the Persian Gulf. This signal would be intended for the Soviet Union as well as regional states. Presently, there is no agreed-upon joint plan within NATO to react to any emergency that might interrupt the flow of oil from the Persian Gulf. However, in recent years there has been some interest shown among certain of the West-oriented countries toward scheduling joint naval exercises in the Indian Ocean and toward at least talking about coordinating naval contingency plans in this area. In 1974, ships and planes from all the CENTO countries participated in the largest naval exercises at that time ever held in the Indian Ocean. In the meantime CENTO has been terminated but France, Great Britain, and Australia continue to hold joint naval exercises

with U.S. naval forces in the Indian Ocean. [Ref. 31: p.38]

In the area of contingency planning French officials have acknowledged that French and American military chiefs in the Persian Gulf area "talk to each other" but imply that this is much better than some formal institutional arrangements that would only attract attention and hostility in the area. [Ref. 33: p. 4]

b. Politico Economic

European nations have emphasized their contention that long-term stability in the Persian Gulf region will depend more on political and economic factors rather than the almost exclusive reliance on deployment of military power, and France has been no exception to this rule. In many respects France's independent foreign policy and aspirations for greater global European influence have been large inhibitors of Franco-American cooperation. Nevertheless, some of France's policies which are at odds with U.S. views provide a diversity in Western policy that could have potential advantages. Indeed the French often point out that one of the strengths of the Western Alliance is its diversity.

Of great importance in this respect is the different stance that the European nations have taken from the United States concerning the Arab-Israeli conflict and efforts to promote a peaceful settlement of this issue. While Americans maintain that the European policy and

France's policy in particular is nothing more than a manifestation of their energy dependency on the Arab states, the French policy nevertheless has allowed France to develop certain relationships with the Arabs, including some of the more radical ones, that would be impossible for the United States. France's recognition of the Palestinian's right to a homeland may be a factor which would gain them greater room for maneuver in the Arab world in a future crisis. This in turn could provide capabilities for France to defend common Western interests--capabilities that would be denied to the United States because of perceived anti-Arab policies.

In addition, largely as a result of her oil dependency, France maintains economic and arms transfer relationships with Middle Eastern and Persian Gulf states. Although it is a moot point concerning the degree that these relationships provide France with influence or leverage, it is a factor in France's capabilities in the area. France continues to act as one of the largest suppliers of arms to the region, especially in such areas as advanced aircraft and missiles and is a major equipment supplier of the Saudi Arabian navy. France has recently sold aircraft to Egypt, Jordan, Lebanon, and Libya and missiles to Iraq and Syria. [Ref. 34: p. 59] Also France has sold 24 Mirage F-1 aircraft to Iraq and 6 Alpha-jet aircraft to Qatar, [Ref. 35: p. 5] as well as entered into a military cooperation agreement with Bahrain [Ref. 36: p. 5].

According to the Kuwaiti newspaper, Al Seyassa, during a visit to the Persian Gulf states in March 1979, President Giscard d'Estaing had talks with the region's leaders involved in the Gulf cooperation council (a framework for economic, political, and security collaboration among Saudi Arabia, Kuwait, UAE, Qatar, Oman, and Bahrain) concerning setting up a joint arms industry. The aim was to build French weapons, Crotale missiles and Mirage III aircraft. Evidently the venture would be along similar lines as the now defunct Arab Organization for Industrialization (AOI). [Ref. 37: p. 4] The AOI was created in April 1975, providing for French technological assistance to help establish an Arab arms industry run by four countries: Egypt, Saudi Arabia, Qatar and the UAE. The project fell apart as a result of Egypt's participation in the Camp David peace process. [Ref. 38: p. 151]

Another report in a French magazine Le Point, revealed that French military experts were reportedly involved in the relief of the Grand Mosque Siege in Saudi Arabia in November 1979. According to this source five French military specialists arrived in Mecca on November 23 at the "top secret request of Saudi King Khalid to President Giscard d'Estaing," and took charge of coordinating and even directing the Saudi soldiers who lifted the two week siege. The report was denied by the French Defense Minister Yvon Bourges at the time, but he stated that a military

mission for technical assistance under the command of a French general had for several years a permanent link to Saudi forces but excluded any intervention in war operation or the maintenance of order. [Ref. 39]

These last two examples of French behavior serve to reinforce the fact that France is deeply involved in the Middle East and Persian Gulf area not only militarily, but politically and economically as well. This involvement is not always in conformance with U.S. policy and at times even works against American designs; however, French policy does provide alternatives which may be helpful to the West in a future crisis.

c. France in Africa

It is useful to examine French policy in Africa for several reasons. Although it is somewhat of a digression from the topic of French capabilities to influence situations in the Persian Gulf area, an examination of French involvement in Africa not only points out some areas such as Djibouti which may be militarily useful in a Gulf contingency, but also highlights France's capability and determination to intervene in areas where she perceives herself to have a vital national interest.

Africa is a region where France's independent policy seems to have had the greatest success to date and French involvement there is based on various interests. Economically, Africa is rich in raw materials including

uranium deposits in Gabon and Niger that are necessary for France's nuclear energy program. Politically, France is concerned that Africa could fall under control of the Soviet Union or such pro-Soviet states as Libya or Angola. Overall, there is a framework of ties between France and many African states formed by geography and history and strengthened by the nature of their economies. Some 260,000 French citizens work in Africa, mostly in North and West Africa and the sealanes around Africa are essential for the transportation of the major part of France's energy imports.

France presently has agreements with Senegal, Ivory Coast, Gabon, and Djibouti which provide for the presence on their territories of certain permanent military facilities, and the use of a number of other ports or airport facilities. [Ref. 40: p. 318] In addition, France has military agreements and the right to station troops or advisors in 25 African countries. There are 22,000 French civil servants--called cooperants--working in African schools and government offices under technical agreements and France now maintains some 7,800 French combat soldiers in Africa, a number which increases to 14,200 when military advisers are included. [Ref. 41: p. 1]

France has enforced stability in Africa with a history of armed intervention. French troops have quelled a military uprising in Niger which supplies France

with uranium and restored a friendly government to power in Gabon. They have put down guerilla movements in Cameroon and Mauritania (1977 and 1979) and crushed tribal feuding in the Congo. They have twice parachuted into Zaire's Shaba Province where France buys cobalt, to protect French interests against Angolan and Katanganese forces. [Ref. 41: p. 1] Most recently, French troops participated in the September 1979 Operation Barracuda to overthrow the corrupt Emperor Bokassa I in the Central African Republic and supplied logistic support to Tunisia against Libyan threats. [Ref. 42: p. 3]

It must be remembered that most of these operations were carried out unilaterally and at a time when the rest of the Western allies were loath to conduct such intervention in Africa. Former President Giscard d'Estaing, leery of seeing France drawn into a proxy war for the interests of the West, campaigned long and as it turned out unsuccessfully to get the Carter administration and the rest of the West to support French efforts in Africa.

3. Constraints on French Capabilities

The fact that France is a European power and must first ensure the defense of Metropolitan France limits France's capabilities to influence events in the Indian Ocean, Middle East, or Persian Gulf. France still deploys some 34,000 troops in the Federal Republic of Germany

and France's military forces are primarily designed and oriented toward a potential East-West confrontation in Europe.

France's independent foreign policy has also placed limits on her capabilities. The need to maintain a credible independent nuclear deterrent has come at the expense of conventional military capabilities. Although as prescribed by the program law, 1977-1982, in order to support a greater conventional effort, nuclear weapons will receive a declining proportion of the total defense effort from 16.8 percent in 1977 to 15.7 percent in 1982. [Ref. 26: p. 585], the restoration of desirable conventional capabilities will be a long-term process. Additionally, because of economic constraints, the original goal of allocating 20 percent of the national budget to defense was lowered in mid-1977 to 18.8 percent* but nevertheless exacerbates the conventional military capability problem.

Concerning the army, one observer characterized the situation as follows: "Although the army is strong in numbers, its program of re-equipment must be speeded up, since this has only progressed at a slow rate as a result of competition with the deterrent force and the large share devoted to the latter in defense budgets. Furthermore, account will have to be taken of the morale

*This change is partly explained by changes in the structure of the national budget.

element, which seems to be the weak link in a not very satisfactory army-nation context." [Ref. 27: p. 84]

Right now the French navy is an impressive force but it is beginning to suffer the ravages of obsolescence and faces a continuing reduction in ships and tonnage until the mid-1980s to the 1990s in spite of a gradual increase in the Navy's share of the budget. Most of the French fleet was constructed prior to the early 1960s, the funds in the intervening period having been diverted to the more sophisticated and expensive nuclear programs. As a result, the increasing sophistication of French warships (such as nuclear attack submarines) will probably come at a cost either in numbers or in manpower.

In summary, the future of the French military appears to be one of intense competition between the various branches for scarce defense budget resources. Large portions of France's conventional stockpile were acquired prior to the 1960s and will have to be replaced before the 1990s. More sophisticated nuclear delivery systems will be necessary in order to preserve the credibility of the French nuclear deterrent. This will entail financing programs for improved MIRVs, cruise missiles, and air and land mobile IRBMs. Added to these are the costs of interventionary operations in Africa and elsewhere, and increasing manpower costs. [Ref. 26: p. 606]

In the absence of an even greater defense burden for the

French people, these conditions will result in a deterioration of France's capabilities in Europe, overseas, or both.

4. French Naval Policy Outside of Europe*

This final segment in the analysis of French capabilities to influence situations in Europe and in the Persian Gulf area is presented in an effort to explain how the French in their own view intend to circumvent the contradictions inherent in their independent foreign policy and their apparent lack of military, especially naval, assets to independently carry out such a policy.

French naval policy in many ways is similar to French defense policy; in particular views on strategic nuclear deterrence and defense of Metropolitan France are the logical extensions of her national deterrent policy. However, in the area of defense policy outside of Europe, French naval writings go much further than those of the other services of the ministry. Naval strategists have defined an additional threat, "indirect strategy," that that they feel France faces overseas and they have adopted French deterrence theory in an effort to respond to it.

Indirect strategy as originally described by the noted French strategist, General André Beaufre, is one of

*This section is a brief summary of a thorough discussion of French naval strategy in Robert, Ref. 43.

two components of total strategy, the other being direct strategy. Whereas direct strategy is the achievement of a decision (or deterrence) by primarily military means, indirect strategy is one which seeks to obtain a result by methods other than military victory. French strategists believe that the more complete nuclear deterrence becomes, the more prevalent the threat of opponents using indirect strategy will become; in fact the strategists are convinced that indirect strategy will become the dominant form of action in today's world.

Indirect strategy can be of two basic varieties: the piecemeal approach or prolonged conflict. In the former type, adversaries will attempt to nibble away at France's weak points by limited military actions separated by periods of negotiation. The latter type will be characterized by a long conflict combined with a psychological offensive designed to wear down France's will to resist.

With the increased activism of the Soviet navy, the development of strong regional states, and especially the events surrounding the shock of the 1973 oil crisis, indirect strategy has become a paramount concern and has attracted wide attention in France. Discounting accident, disruption of the East-West military balance, or the spread of conflicts that start outside of Europe, the French expect indirect strategy to be a more likely

occurrence than the application of direct strategy in Europe. Of the two forms of indirect strategy, the French navy is more concerned with the piecemeal approach which is most likely to be exercised at sea. Within this piecemeal threat are a number of possibilities ranging from conflicts over territorial waters or economic zones at sea or disagreements over the imposition of environmental regulations which could be used as a pretext to interfere with commerce, to covert military actions at sea.

The French fear the threat of indirect strategy because it can endanger vital French interests without triggering France's strategic deterrent. For example an attack on several merchants would not justify a nuclear response or be credible if France threatened it; however, several carefully selected attacks of this nature could raise merchant insurance rates so high as to threaten France's imports of oil or other necessities.

There is a wide range of external interests that France is bound to protect including: searoutes vital to her commercial exchanges and her supplies of raw material (petroleum, uranium, etc.); fishing areas; areas earmarked for scientific, technical, and military experiments (e.g., the experimental nuclear center in the Pacific, and the French West Indies Aerospace Center); actual overseas interests (e.g., French Overseas Departments and Territories); and responsibilities to defend and maintain law and order

in certain African nations bound to France by various bilateral agreements. One concerned observer described the situation as follows, "France could be brought to her knees in three months or less if her overseas connections were cut, even if her land frontiers were never crossed."

[Ref. 43: p. 296]

France realized that in a world with two super-powers and a number of strong regional powers, she does not have the ability to respond to all threats with brute strength. Instead France has applied her version of deterrence theory to naval doctrine in an effort to develop a defensive strategy "for the weak against the strong." Since France cannot afford to buy extensive conventional forces or to fight a long conventional war she has rejected flexible response as an option. Instead, France has tried to develop an equivalent to flexible response which instead of countering each threat with an appropriate amount of force, counters it with an appropriate deterrent.

France plans to respond initially to an aggression with a coup d'arrê^t--a swift, sharp move at a level of violence appropriate to that used by an aggressor, the purpose being not necessarily to defeat him militarily but to show that France has the resolve to defend her interests, that the aggression has been detected, and that France has the ability to inflict severe pain on an aggressor.

Hopefully, this would nip the aggression in the bud before it gets too big for French forces to handle. But if the aggressor defies this warning and confirms his aggressive intent, France would increase the level of violence until the aggressor realizes that the price to be paid to reach his objective has become exorbitant and he backs down. In short, France would deter her opponents by showing her readiness to ascend an escalating ladder, the top rung of which in her case, is a strategic nuclear force. France's policy is ambiguous on the eventual use of the strategic nuclear deterrent especially in the third world, but there are indications of the possible use of sea-borne tactical nuclear weapons.

B. FRENCH FOREIGN POLICY AND INTENTIONS

In order to analyze French intentions in the event of a crisis in Europe or overseas in a vital area such as the Persian Gulf, several factors must be taken into consideration. First and foremost is the concept of a French independent foreign policy which will be examined in relation to the way this policy is explained by leading government figures. Secondly, a description of French defense policy is essential. Third, a brief look at France's reaction to and behavior after the Soviet invasion of Afghanistan may provide some clues to future French behavior. Finally, it is necessary to review the policy

of the new socialist government of Francois Mitterand as it has been enunciated to date.

1. France's Independent Foreign Policy

If France were to align itself with some other country's policy the French policy would be simple, but it would cease to exist as such. Seen from the outside France would become the province of a super-power. This isn't the lesson we learn from our history and it's not what the people of France want either. They want us to be loyal to our alliances, as indeed we are, and at the same time pursue an independent policy that respects our solidarities.
[Ref. 44: p. 1]

This statement by President Giscard d'Estaing in February 1980 captures the paradox that seems to characterize French policy as observed by outsiders. How is it possible to both pursue an independent course and yet remain faithful to alliance goals? Since the days of President Charles de Gaulle, French leaders have maintained that there is no contradiction in this stance and their aim has been to escape the limitations of a mutual but unequal dependence within the Atlantic Alliance. Whereas the senior partner of the alliance, the United States, has sought to maintain the global status quo, France has been interested in a gradual transformation of the existing international order to fulfill a perceived destiny of national grandeur. Thus during de Gaulle's era French foreign policy was characterized by a deep-rooted antipathy toward the privileged position of the two superpowers and hence toward American hegemony in Europe. Former

President de Gaulle also harbored a suspicion that in a tight spot the United States would fail to honor its commitments to European defense. Out of this suspicion grew the basic tenet of France's policy--that France is unwilling to allow another state, even an ally, the exclusive responsibility for decisions controlling her life and death.

The relaxation of tensions in Europe relative to the immediate post-war period and the growth of France's nuclear arsenal were exploited by France to expand her own diplomatic flexibility. Thus she withdrew from NATO's integrated military structure and established new contacts with the Soviet Union and East European states. Such contacts were designed to lead first to detente and ultimately to entente and cooperation in Europe in which France naturally felt she would play a leading role.

The aims of France's international actions as recently explained by former President Giscard d'Estaing reflect essentially the same goals: first, to defend France's interests, especially its security; second, to try to preserve peace; third, to enable Europe once more to exercise some influence over world affairs. Recent evolution in the international system, that is the growth of third world influence (and probably France's dependence on third world countries for raw materials and energy) led President Giscard to emphasize a fourth goal of French

foreign policy--to help organize a world that takes into account new realities and rectifies injustices, in other words a greater recognition of third world interests.

[Ref. 44: p. 3]

In pursuit of the first goal, the protection of French interests and security, France has relied upon her nuclear deterrent, her association with the NATO alliance, and her conventional naval doctrine to counter indirect strategy as has been previously discussed. Thus President Giscard has described French policy as "the action of a country that belongs to an alliance, that pursues an independent policy, and recognizes ties of solidarity." [Ref. 44: p. 5]

To achieve the second foreign policy goal of trying to preserve peace, France has been deeply committed to the policy of detente; they in fact claim to be the initiators of this policy under de Gaulle's leadership. This policy was continued under President Pompidou and culminated in the signing of a Franco-Soviet Protocol in October 13, 1970, which states in particular that;

should situations arise which in the view of both sides would pose a threat to peace, would end peace, or would cause international tension, the French and Soviet governments would immediately enter into contact in order to consult each other on all aspects of these situations and on steps which could be taken to face them. [Ref. 45]

The detente process was continued under the Giscard regime and was highlighted by an accord signed by Giscard

and Soviet President Brezhnev in June 1977, in which they agreed to triple Franco-Soviet trade within four years. Presently, the Soviet Union is France's tenth largest customer receiving slightly less than two percent of France's exports [Ref. 46], but trade is rapidly expanding.

The other aspect of France's detente policy is relations with Eastern Europe the importance of which President Giscard d'Estaing described after the Soviet invasion of Afghanistan as follows:

Relations between France and certain European countries--and I am thinking of Poland, of Romania, of Hungary, and recently I think of East Germany--have become transformed, have been accentuated. They have certainly modified the situation in Europe. I tell you for the benefit of those who talk so willingly about giving up detente that this would plunge some European peoples into despair, those who are our partners in the quest for detente. [Ref. 25: p. 23]

France's commitment to the third foreign policy goal, that of increasing the power and prestige of Europe has been described by President Giscard in the following manner,

Until now two major voices have been heard in the world, the United States and the Soviet Union, and other countries were only expected to voice their opinion in relation to those two....It is important to show that the European powers have special responsibilities...because they exist as powers, because they have a major and growing economic and political capacity...and because they have special concerns about the preservation of peace. [Ref. 47]

Naturally as a leading nuclear and economic power, France envisions herself as a leader of this resurgent Europe.

In furtherance of the fourth component of her foreign policy, the increased recognition of third world interests and development, France has taken several steps both within the European community and unilaterally. Typical of these acts were France's signing of the Lomé Convention facilitating economic relations between Europe and third world countries and France's declared goal of increasing the North-South dialogue while raising the level of French aid to third world countries to 0.7 percent of the gross domestic product, excluding her overseas departments, which would mean a very considerable increase. [Ref. 48: p. 7]

These four goals, ensuring the security of France, maintenance of peace and detente, increasing the international stature of Europe, and furthering the North-South dialogue, are the basic elements of France's independent foreign policy as espoused by her leaders. It is by achieving these objectives that the French hope to increase their influence in the world and control their own destiny.

2. France's Defense Policy

The defense policy of France, like any state, is one of the most crucial elements that affect her ability to achieve her foreign policy goals as they were discussed in the previous section. Additionally, France's defense policy is important because it offers clues to her intentions in relation to potential crises in Europe or overseas.

France's defense policy, like her foreign policy, is enigmatic and fraught with ambiguities. For this reason it is helpful to present a brief review of French defense policy as it evolved under President Giscard d'Estaing while focusing on France's intentions for contributing to European security. Of equal importance for our purposes is French defense policy in regard to the security of her oil supply in the Persian Gulf.

a. Relating to Europe

France's defense policy in relation to Europe entails two basic elements; the contribution of her independent nuclear deterrent and its relevance to Europe, and her intentions concerning the use of her conventional assets in a European conflict. Concerning the latter, ever since France's withdrawal from NATO's integrated military structure in 1967, French troops have not been formally committed to NATO and France does not participate in formal NATO planning for military contingencies. However, there has been a degree of joint contingency planning between French and NATO forces under the umbrella of the Lemnitzer-Ailleret agreement (between the 1967 French Chief of Staff and the 1967 NATO Commander) providing for limited coordination between the two forces. [Ref. 49: p. 20] However, this planning proceeds under a fundamental caveat: it takes effect only if the French government makes the national decision to go to war. This

effort has resulted in the development of some joint contingency plans and exercises, but it has not resolved the fundamental difficulty with respect to strategy.

It is within this background of uncertainty that numerous statements made by President Giscard and his associates in 1975 and 1976 initiated a debate within France concerning the role of her strategic forces and their relevance to Europe, and the relation of these forces to their conventional counterparts. Giscard's statements seemed to call into question the traditional strict Gaullist strategy of primary reliance on proportional nuclear deterrence by focusing on greater flexibility of both military doctrine and assets to meet shifting exigencies in the European theater and in France's global interests. His statements implied a shift in emphasis away from nuclear weapons and in the direction of reinforcing the conventional components. Additionally, he hinted that these strengthened conventional forces could potentially play a more active role in the wider European theater and permit France to act in areas beyond Europe to protect specific commitments and to influence future events--for example by providing a limited military force to stabilize the situation in Lebanon, as Giscard had proposed informally during his trip to the United States in May 1976. [Ref. 24: p. 64]

The most controversial initiative was the reference by General Méry to "enlarged sanctuarization" which implied that France's deterrent protection might extend beyond French borders to her neighboring allies. This called into question portions of the 1972 defense white paper, which consistent with traditional policy, had stressed that "proportional deterrence" was purely national and could ultimately only protect France ("Proportional deterrence" theory holds that France's threat of nuclear retaliation can deter the Soviet Union because the damage France could cause by targeting Soviet cities exceeds what the Soviets would stand to gain in conquering or destroying France). [Ref. 50: p. 3]

To add fuel to the fire, General Méry made further amplifications to Giscard's statements, implying that France would possibly contribute to the forward battle in Germany because it was difficult to conceive of a European defense that was completely independent of the Atlantic Alliance which reiterated Giscard's view that,

It would be illusory indeed to hope that France might retain anything more than a diminished sovereignty if its neighbors came to be occupied by a hostile power or simply to pass under its control. The security of the whole of Western Europe is, therefore, essential to France.

Indeed, Méry argued that France might use its forces including Pluton tactical nuclear weapons to intervene beyond its borders. [Ref. 24: p. 64]

The critics of Giscard's initiatives cut across party lines and it is natural that retired General Pierre Gallois, the most outspoken proponent of strict Gaullist defense views, was particularly critical. The heart of Gallois' argument is that,

in the nuclear age France has a specific role to play as defined by her continental position and the limited resources at her disposal to defend the security of that position. If she is attacked, France will have no other recourse but to retaliate massively against the aggressor. There is no need to test the opponents intention: once the frontier is crossed his intentions are obvious. Neither is it possible for France to contribute to the battle for Europe with conventional forces, for to do so would only weaken France without in any way averting a Western defeat." Gallois has also objected to, "the refurbishing of the surface navy without regard to the new mission that it must fulfill. [Ref. 24: p. 63]

Retired General Lucien Poirier, who devised the strategic model on which the 1972 white paper was based, apparently disagrees with Gallois only in that Poirier thinks tactical nuclear weapons can have legitimate "test" and "Warning shot" roles. [Ref. 50: p. 14] He has further argued that,

We therefore face the following problem, how to participate with our conventional forces alone in the common forward defense in the not unlikely eventuality that the NATO defense is pierced locally...political and strategic logic argues against our committing our forces to fill any breach in the allied defense systems, for to do so would be to run the risk of seeing our conventional forces...prematurely wiped out and France unprotected against any enemy on the threshold of our sacrosanct space. [Ref. 6: p. 36]

By the eve of the 1978 legislative elections, President Giscard felt it prudent to backtrack and responded

to his critics by adopting a declaratory policy which reaffirmed the primacy of nuclear forces and maintained that the government's defense policy remained firmly within the framework set forth by General de Gaulle and Georges Pompidou. It must also be kept in mind that Giscard had never cast doubts on France's autonomy of decision or his faith in proportional deterrence throughout the debate. The result of the whole debate affair from 1976 was that the Giscard regime produced no strict change in declaratory policy but mounting evidence existed that supporters of the orthodox Gaullist view which gives primacy to the nuclear forces and the strategy of proportional deterrence were being challenged on a number of grounds by those who favored a more ambiguous or flexible strategy. [Ref. 24: p. 69] Despite these factors France's determination to maintain autonomy of decision in all aspects of its security policy still created a permanent degree of uncertainty concerning possible French actions.

b. Overseas policy

In regard to virtually every international trouble spot, the French seem to deplore the use of any rigid framework that may curtail their autonomy of decision to effect a solution to the problem. This sentiment was echoed by the Brussels' symposium Panel III (leadership and organizational problems) meeting in September 1979 to discuss problems relating to the Atlantic Alliance. This

panel acknowledged that "France for some years now has effectively blocked meaningful political consultation in the North Atlantic Council on problems outside the NATO area despite France's signature on the Ottawa Declaration of 1974." The panel pointed out that the North Atlantic Council operates on a consensus basis, therefore France like other allies has what amounts to a veto over what is discussed. [Ref. 51: p. 1]

On the other hand French policymakers have argued that France, unlike her allies, had "special relationships," sometimes historical, oftentimes economic which require unique diplomatic approaches. They also argue that a great strength of the Western alliance is the alliance's diversity and that French initiatives have kept the alliance from becoming too rigid.

French officials go even further saying that in confronting new dangers outside the European theater, "France is more pragmatic than her Anglo-Saxon allies." They point out that when former U.S. Secretary of State Edmund Muskie proposed that a joint Western naval force be deployed in the Persian Gulf in response to the Soviet invasion of Afghanistan, France resisted the idea reasoning that a multinational show of force would only re-ignite old anti-colonial feelings in the area and give the Soviets "a perfect pretext" for increasing their own pressure in the Gulf. [Ref. 52: p. 4]

The result was that France deployed its own naval task force of 15 vessels to the Gulf area. This plus the units stationed at Djibouti was intended to back up the French government's declaration that any attempt to cut off the Straits of Hormuz or other access routes to the Persian Gulf would be treated as an attack on French national interests. [Ref. 52: p. 4] Said one official,

We made this declaration about the same time as President Carter was making a similar declaration; we have deployed forces to the area, so have the Americans. Thus, the necessary results are achieved: what matters are the results, not the creation of some new multilateral force. Moreover, in the case of the French deployment it has all been done without fanfare. [Ref. 52: p. 4]

Later, at the same time as Britain's Prime Minister Thatcher's declaration in Washington of her government's willingness to support the American rapid deployment force, French officials let their view be known that she might have done better to say less and deploy more actual forces to the Gulf. [Ref. 52: p. 4]

c. France and the Soviet Invasion of Afghanistan

It is interesting to analyze French behavior in connection with the Soviet invasion of Afghanistan because their behavior provides an indication as to what level of crisis the French deem it is in their interest to forego to any extent their independent policy and solidly align themselves with Western interests, especially with respect to the United States.

It quickly became obvious that the French did not view the Soviet invasion of Afghanistan as "the most serious threat to world peace since World War II," as President Carter had described this event. As a result, to many Americans the French reaction and behavior after Afghanistan were irritatingly familiar. After initial condemnations, the French refused to participate in a February 1980 meeting of allied foreign ministers, ignored American appeals for an Olympic boycott, and refused to impose economic sanctions on the Soviet Union. Instead President Valéry Giscard d'Estaing traveled to Warsaw in May 1980, for a private meeting with Soviet President Brezhnev. The French explained that this behavior was not because they disagreed with the Carter administration's actions, but because European nations should use tactics better suited to them. Thus, the French preferred to maintain a dialogue with Moscow while publicly condemning the Soviet action.

Particularly irritating to Americans was the French refusal to attend the five nation summit proposed by Secretary of State Cyrus Vance in February 1980. The reply from France was typical--"France is not in favor of an atmosphere of confrontation. It is necessary to endeavor to avoid anything that leads to or involves the rebirth of blocs. [Ref. 53]

The French method of solving the crisis over Afghanistan was put forth in January 1981, by President Giscard in which he called for "a conference on ending the interference in the affairs of Afghanistan." The aim of this conference was "to bring together all countries who, whether rightly or wrongly are accused or suspected of interfering in the internal affairs of Afghanistan."

[Ref. 54: p. 1]

Previously Giscard had endeavored to present a united European stance on Afghanistan by consultation with Chancellor Helmut Schmidt of the Federal Republic of Germany with the view of assimilating the French and German points of view. As a result of this Franco-German summit of February 5, 1980, a joint communique was issued which pointed out to the Soviets that, "detente had become more difficult through the events in Afghanistan and would not be able to withstand another such blow. In the latter case the Western alliance would have to take necessary measures to preserve its own security and protect international stability. [Ref. 55: p. 6] Although heralded as a tough stance by the Western press, this statement provided the dual implications that Afghanistan had neither shattered the premises of Western detente policy nor rendered necessary immediate supplemental military efforts, let alone economic or other countermeasures.

In short, French statements after Afghanistan said little about the interests of the alliance in the region outside NATO's traditional boundaries and little or nothing about the need for NATO jointly to increase its power to defend its interests in the Persian Gulf region and nothing in public about facilitating the application of American military power to help protect French and other European interests there. The situation in Afghanistan was one in which the French perceived that their interests could still be defended without sacrificing their autonomy of decision. Thus, their behavior was consistent with their stated foreign policy goals. France avoided actions which tended to polarize states into superpower blocs and emphasized a European solution to the crisis. Although the French repeatedly stated that the Soviet invasion was unacceptable, they refused to repudiate the detente process. Above all France retained her autonomy of decision. As if to dispel any doubt about this latter point, French Foreign Minister Jean Francois-Poncet in response to criticism concerning the Franco-Soviet dialogue in May 1980, replied, "France holds talks with whomever it wants, when it wants (and)...does not need permission from anyone for this." [Ref. 56: p. 204]

d. The Policy of François Mitterrand's Government

The socialist victory in France created a change in leadership personalities, yet the defense

policies of the new administration seem to be following the basic guidelines of the concepts established in the 1972 white paper with some shifts in priorities. The most important changes are the reemphasis on French strategic deterrent forces and a possible reversal of the trend under Giscard d'Estaing to move French strategy and capabilities into closer accord with NATO's continental strategy. Additionally, François Mitterrand has publicly called for a change in France's intervention policies, especially in Africa.

The leadership of François Mitterrand was anticipated with mixed feeling by the Western allies. On the positive side he had repeatedly criticized President Giscard d'Estaing for failing to respond more promptly to Soviet actions in Afghanistan; in particular, he condemned Giscard for meeting with Soviet Premier Brezhnev in Warsaw on May 18, 1980, thereby appearing to condone Russian behavior. His own intention, he declared, was to deal more firmly with Moscow. The allies also welcomed Mitterrand's support of NATO's LRTNF program and his view that peace is linked to the balance of forces in the world and that the installation of the Soviet SS-20s and Backfire bombers had broken that balance in Europe. [Ref. 57: p. 41] Also welcomed was his frankness during the election campaign in which he commented that,

Falling back on themselves can in the long run invite France to a sort of neutralism regarding affairs of the world and in particular affairs of our close friends. If we refuse all solidarity with them, how can we expect theirs? [Ref. 35: p. 1]

Nevertheless, some previous comments by Mitterrand called into question his commitment to the Atlantic alliance. In addition to castigating Giscard as an "Atlanticist," Mitterrand also stated that,

the alliance no longer has any content. A summit is urgently needed to review the relations which unite the countries belonging. No one in the West knows where the Alliance stands, its scope, the reciprocal obligations it entails, or its degree of automation. The Alliance is based on fiction: American intervention in Europe in the event of Soviet aggression. [Ref. 58: p. 1]

Despite this pre-election rhetoric, the government of François Mitterrand has in general neither resolved or exacerbated the ambiguities with respect to France's participation in the defense of Europe. However, in relations with the United States many points of agreement have been reached on defense matters. In a recent October 1981 meeting between U.S. Secretary of Defense Weinberger and French Defense Minister Charles Hernu, both took a hard line against anti-nuclear and anti-military elements in Europe as well as agreeing on the value of the enhanced radiation weapons as a defensive weapon. In addition, the French quietly agreed to an unofficial delay of arms shipments to Libya in response to U.S. requests. In general, Mr. Weinberger found the French to be far more in tune with the Reagan

Administration defense policies than the other NATO military allies. [Ref. 59: p. 3]

Concerning Europe, the NATO alliance and the role of France's nuclear and conventional assets, the Mitterrand government has exhibited great continuity with the Gaullist past. His commitment to France's nuclear deterrent was shown by his announcement to proceed with the construction of a seventh strategic nuclear submarine. In addition he has retained the basic French concepts of proportional deterrence, the sanctuary of France, autonomy of decision-making, the non-integration of France's military in NATO, TNWs as warning shots, reticence to take part in the forward battle for West Germany, and the position of France between the two superpower blocs.

In relation to events outside of Europe, Mitterrand has assumed a different declaratory policy from the previous administration. The policeman's role in Africa does not appeal to Mitterrand who in opposition denounced France under Giscard as, "the Cuba of the West," for military meddling in Africa. Since his election he has argued that France's priority in Africa is, "to attack the profound causes of instability-economic and social ills." [Ref. 60] His party has called for renegotiations of France's military agreements with African nations so that French troops won't be

used to prop up extant regimes as in the past. According to Mitterrand, French troops will only be used in Africa to protect French nationals or to resist outside aggression upon request of the African nations.

Consistent with this policy, 1,400 French troops remained in their barracks in the Central African Republic when former President David Dacko was toppled there in a bloodless coup in September 1981. Though French forces had unseated Mr. Dacko's predecessor, the notorious self-proclaimed Emperor Jean Bedel Bokassa, and installed Mr. Dacko two years ago, French officials said the latest military coup was an internal affair. [Ref. 60]

Along the same lines, the French interventionary forces (force d'intervention extérieure) have been renamed the force d'assistance rapide. But despite the new declaratory stance, the interventionary forces will be maintained and improved by the addition of increased Transall airlift capability, and new External Relations Minister Claude Cheysson has commented, "If something were to happen tomorrow and we were called on to meet one of our obligations, we would do so." [Ref. 61: p. 9]

In relation to France's vital interests in the Persian Gulf-Indian Ocean region, official sources in the Mitterrand government have stated that in a serious crisis France not only envisages military cooperation with U.S. forces, but that this is one of the purposes of France's

deployment of forces in that region. The French expect that the United States would be more likely to act to protect the common interests of the West if other allied forces are present on the scene. [Ref. 62]

What all this suggests is that General de Gaulle's basic vision continues to dominate the security outlook from the Elysee Palace, irrespective of the political coloration of its habitants--particularly the premise that for France, given her geographic position, her historic role and commitments, and her political and economic interests, there really is no alternative to the policy of independent national deterrence with all its inherent ambiguities. [Ref. 57: p. 49]

C. SUMMARY AND FUTURE PROSPECTS

Alan Ned Sabrosky has suggested that in the recent past France has pursued variants of three basic policy alternatives:

(1) an independent policy, in which she endeavored to act as a diplomatically autonomous state;

(2) an Atlantic Alliance policy, which entailed active participation of the United States in European affairs; and

(3) a European policy explicitly without U.S. participation, at times restricted to Western Europe and at others extended to Eastern Europe as well, but in all cases one in which she has tried to present herself as the leading Continental state.

Sabrosky concluded that the French government would find an independent policy the most attractive, but the least feasible; an Atlantic Alliance policy the least attractive, but the most feasible; and a European policy moderately attractive, but scarcely feasible in the medium term. Unwilling to choose among these alternatives, the government has decided to temporize. [Ref. 63: p. 579]

This statement was made in 1976, but today the situation remains much the same. The purpose of this analysis was to investigate the role of France in the protection of Persian Gulf oil supplies, but this problem does not exist in isolation, rather it is intimately related to the role of France in the defense of Europe, for as vital as the energy from the Persian Gulf is to France, nothing can be more vital than the security of the Metropole.

Consistent with Sabrosky's analysis, this discussion has sought to point out that France will do everything that is possible to maintain her independent foreign policy. This had been the lesson of Afghanistan in which case France did not consider the level of crisis to be so acute that she would be compelled to relinquish her independent policy in favor of dutifully subscribing to American policies.

This is not to say that in a future crisis in which France perceives that the threat to either her

territorial security or her overseas economic lifeline has exceeded her capability to cope with it, she will not fully cooperate with her Western allies. On the contrary, recent international developments coupled with domestic French resource constraints will probably make such co-operation more necessary in the future.

The increasing pace of technological advances by the Soviet Union could in the future call into question the credibility of the French deterrent force. Already the ability of aging French strike aircraft to penetrate Soviet air defenses is questionable and the increased accuracy of Soviet missiles places France's land based deterrent at risk. The submarine force, will in the future necessarily be both more sophisticated and expensive. This factor alone will increase the competition for defense funding between nuclear and conventional forces.

Increased obligations overseas, particularly in the Persian Gulf and sea lanes around Africa, and limited naval strength will further weaken the already scarcely credible French naval doctrine of the "weak against the strong" to combat indirect threats.

The doctrine of proportional deterrence which is the mainstay of France's European defense, and the naval doctrine to combat indirect strategy, which is the keystone of France's overseas security, could both suffer

loss of credibility due to increased social economic constraints. The possibility is even more likely under the current Socialist regime which is politically obligated to install more expensive social programs such as an increase in the minimum wage, increases in pensions, housing subsidies, and more government jobs.

Already several influential French writers have admitted that the weakest link in France's overseas strategy is the defense of the sea lanes and have repeatedly stated that she cannot do this alone--that she would need allies. The French seem to believe that any crisis affecting the sea lanes will affect all of Western Europe and the U.S. and they expect that the allies would be there when needed. General Guy Méry has written:

We have thought it reasonable to be in a position to show it (maritime presence) in two areas simultaneously at present, for example in the Mediterranean and the Indian Ocean. It goes without saying that in a major conflict this naval presence could not in all cases be carried out by French forces alone. The length of sea routes would necessarily lead us to cooperate with others. It is nevertheless important that our participation be significant and that we be prepared to act temporarily on our own in situations of acute crisis. [Ref. 40: p. 325]

Perhaps more subtly Admiral F. R. Lannuzel has added:

It is true that beyond a certain threshold of aggression the interdependence of maritime trade would be relied on to an increasing extent and would lead, of necessity, to France's allies helping out on all sides: the fact is, therefore, that France's contribution to the protection of lines of communication must be shared with the protection she receives from others, and thus she runs a great risk in losing one part of her liberty.... [Ref. 28: p. 12]

In short, the increasing strains on the credibility of France's proportional deterrent strategy and her overseas naval strategy will in the future increasingly force her to rely upon and cooperate with her allies, no matter how reluctantly. The only alternatives are an increased contribution to defense spending which would severely tax the political will of the nation, or greater deference to Soviet wishes. The latter case seems less of a possibility because as Giscard has said, "This isn't the lesson we learn from our history and it's not what the people of France want either." [Ref. 44: p. 1]

IV. WEST GERMANY AND THE SECURITY OF THE PERSIAN GULF

The Federal Republic of Germany, like France, has been profoundly affected by the events of the past decade. The Arba oil embargo of 1973 and the Soviet invasion of Afghanistan in 1979 served notice that extra-regional events could pose threats to West German security of equal or possibly greater significance than the Soviet threat in central Europe. The recent turmoil in Poland, on the other hand, serves as a stark reminder of West Germany's vulnerability in Europe and the central role that the Federal Republic plays within the Atlantic Alliance in the defense of Europe.

While a debate centering on "out of area" responsibilities to meet the perceived Soviet threat to the Persian Gulf area has raged within NATO circles, it has generally been acknowledged that West Germany's military role would remain the same as it always has been--the cornerstone of the Alliance's conventional defense in Europe. Nevertheless, NATO allies, particularly the United States, have increased the pressure on the Federal Republic to assume a greater role, especially in the economic sphere in Turkey and elsewhere.

Lately, however, the Federal Republic has become increasingly reticent to continue to fulfill its traditional role as the alliance resource pool. From the

beginning of the NATO alliance West Germany was seen as a source of men, money, and material (as well as territory) needed to close the gap vis-à-vis the Soviet Union and later the Warsaw Pact. Particularly within the last two decades the Federal Republic with its growing economic strength has supplied the alliance with a power source, both for the maintenance of day-to-day conventional military capabilities and for the potential increases required in crisis or in a changing international environment.

In the early days of the NATO alliance when the Federal Republic under the leadership of Konrad Adenauer made the clear decision in favor of an expanding consumer economy, participation in West European integration efforts, and an Atlantic Alliance, West German behavior became predictable and a "special relationship" developed between Bonn and Washington. Nevertheless, the West Germans never entirely gave up the idea of a single united Germany. Since that time, several factors (including the increasing economic strength of the FRG, the advent of strategic nuclear equivalence between the superpowers, and the evolution of detente and the Federal Republic's Ostpolitik) have afforded the Federal Republic a greater degree of independence within the alliance.

These processes (plus the recent intrusion of extra-European crises) have created a situation where the

Federal Republic is less willing to accept sacrifices in behalf of a "special relationship" with the United States within the Atlantic Alliance. This chapter will examine the capabilities of the Federal Republic in relation to protecting Western oil supplies and assess West German intentions.

A. WEST GERMAN CAPABILITIES IN EUROPE AND THE PERSIAN GULF

While the FRG could employ political, economic, and military assets in Europe, she is much less able or willing to employ military assets overseas in the event of a serious crisis. Therefore this discussion will provide a summary of the most important West German capabilities in Europe, but the analysis of capabilities in the Persian Gulf area will primarily focus on political and economic strengths.

1. West German Capabilities in the European Theater

The geographic situation of the Federal Republic of Germany, highly threatened as she is along the border of the Warsaw Pact, and our economic power are the quantities by which our military contribution to the Alliance is measured. [Ref. 64: p. 24]

This statement in the Defense White Paper, 1979, summarizes the importance of the Federal Republic in the defense of Western Europe. Due to the German renunciation of the production of nuclear, biological, and chemical weapons, on October 23, 1954, the main military contribution of the Federal Republic to Western European defense

centers around her geostrategic space, economic power, and the strength of her naval, air, and land conventional forces. The Bundeswehr provides in Central Europe 50 percent of the NATO land forces, 50 percent of the ground-based air defense resources, 30 percent of the combat aircraft, and in the Baltic, 70 percent of the naval forces and 100 percent of the naval air forces. [Ref. 64: p. 24]

The Bundeswehr is conceived as an armed force in an alliance; therefore, it has different forms of authority over its formations assigned to NATO in peacetime, in a crisis, and in the event of war. The air defense forces are continuously under NATO command and most of the German active formations are either assigned to NATO or earmarked for such an assignment during a given phase of the NATO alert system. Within this structure, the West German army consists of the Field Army, which is transferred to NATO command in wartime, and the Territorial Army, which remains under national command.

On November 6, 1979, as a result of nearly six years of analysis and experimentation the West Germans decided to adopt a new army structure, army structure 4. Within this structure the Field Army consists of twelve divisions with 36 brigades which are manned at 90 percent in peacetime, corresponding to NATO's highest readiness category. These forces of the Field Army comprise 275,000 soldiers in peacetime and can be quickly

augmented upon mobilization to 440,000 troops in wartime. [Ref. 65: p. 36] This new structure of 36 brigades meets an old commitment undertaken within NATO and has as its primary purpose the strengthening of the conventional capability of the alliance in response to the growing threat posed by Soviet armor.

The other element of the German land forces, the Territorial Army, which comprises territorial commands, military district commands, and military region and sub-region commands, will essentially remain unchanged under army structure 4. However, the manoeuvre and security troops--the home defense component--will be reorganized under the new army structure by the mid-1980s. The newly organized Home Defense Brigades will enable the Territorial Army to conduct combined operations in depth and reinforce NATO formations employed in forward defense operations. Additionally, peacetime manning levels of one of the home defense brigades will be 85 percent of its wartime strength, two brigades will be manned at a level of 65 percent, and the remaining two at 52 percent, thus increasing their capability to execute their mission in the Rear Combat Zone. Newly organized and better equipped security troops of the Territorial Army will include 45 motorized infantry battalions organized in 15 home defense regiments to be employed in area defense, plus 150 home defense companies and 300 security platoons for vulnerable

point protection in the rear areas. [Ref. 66: p. 47]

The total manpower of the Territorial Army can be increased from 65,000 in peacetime to 445,000 in wartime. Thus the total wartime potential of the German army is close to 950,000 troops which can be quickly mobilized.

[Ref. 65: p. 37]

This impressive manpower total is augmented by superior equipment which is among the best in the Alliance. The Field Army possesses some 12,000 tanks, 3,500 pieces of heavy artillery, 2,400 missiles, and 500 helicopters including such new designs as the Leopard II main battle tank and the Milan anti-tank guided missiles system.

[Ref. 67: p. 5] The Field Army is highly mechanized with seventeen mechanized or "Jager" brigades, sixteen armored brigades, and three airborne brigades. Under the new organization increased stress has been laid on improved anti-tank defense capability in order to preclude a successful Warsaw Pact surprise attack in the Central region.

West German officials consider the essential attribute of their army to be an almost instantaneous reaction capability and a permanent state of operational readiness, adding that the quality of the equipment, high level of training, high proportion of regulars or medium and long-term volunteers make the West German armed forces the backbone of European defense.

The Bundesmarine (West German Navy) has a peacetime strength of 38,000 men operating 24 submarines, 11 destroyers, 6 frigates, and 6 corvettes, as well as 120 smaller craft. [Ref. 67: p. 5] These vessels are backed up by 130 combat aircraft of the fleet air arm. The Bundesmarine serves primarily a regional function within NATO's naval strategy, originally being set up in 1955 with the intent of operating in coastal waters only. Its prime mission was the defense of the Baltic approaches. In the 1960s, the area of operations was extended to the North Sea and most recently, with the endorsement of her NATO allies, the FRG extended its naval operations to include Arctic waters. [Ref. 68: p. 5]

West German naval officials define their primary tasks as follows:

- (1) to degrade the offensive capability of the Warsaw Pact in the Baltic
- (2) to impede the use of Baltic waters by an aggressor,
- (3) to contain enemy forces within the Baltic,
- (4) to fend off attacks upon friendly coasts, and
- (5) to deny the enemy use of the maritime connection between the Baltic and the North Sea.

[Ref. 69: p.5]

These tasks are complicated by the fact that the major part of the Baltic coast is in the hands of littoral

states of the Warsaw Pact and neutral Sweden. Additionally, in the Baltic the Warsaw Pact forces have a five to one numerical advantage over NATO forces. Thus, the navies of West Germany and Denmark are confronted with the Soviet Red Banner Fleet comprising 380 surface ships, 65 submarines, and 260 aircraft; the German Democratic Republic navy comprising 140 surface ships and the Polish navy with 140 surface ships, 4 submarines, and 90 aircraft.

[Ref. 69: p. 53]

Although the security interests of Denmark are intimately associated with those of the Federal Republic in this area, the Bundesmarine bears the main burden in the Baltic. To make the best use of its primary advantages of the narrow straits and the defensive position, the Bundesmarine has placed primary attention in the armaments field in the development and construction of conventional submarines, fast patrol boats, minelayers, and naval fighter bombers. The 24 conventional submarines of the 205 and 206 classes are difficult to detect, and ideally suited to take advantage of the shallow waters, islands, and inlets of the Baltic Straits. The Bundesmarine's fast patrol boats, including the sophisticated 148 and 143 classes capable of carrying modern long-range missiles, torpedos, and effective electronic warfare equipment complement the submarines in the anti-shipping task. These assets are designed for joint operation with the

naval fighter-bombers, which are being upgraded by the introduction of the Tornado Multirole Combat Aircraft (MRCA).

The Bundesmarine also contributes to the defense of the North Sea with its ports and debarkation areas for the reinforcement of NATO. The employment of Bundesmarine destroyers, frigates, maritime patrol and anti-submarine aircraft, naval fighter-bombers, and mine countermeasures forces in this area is not substantial, but the Bundesmarine releases forces of other allies for duty in the Atlantic or beyond NATO's treaty area. Additionally, the Bundesmarine contributes on a rotational basis to the Standing Naval Force Atlantic (STANAVFORLANT), which is a NATO multinational force composed of five to nine destroyers or frigate-type ships. This force is permanently deployed and has as its basic objectives the improvement of NATO teamwork, the demonstration of solidarity in the alliance, and the maintenance of the capability for rapid deployment to a threatened area in times of crisis or tension.

The West German air force or Luftwaffe has more than 100,000 men, mainly regulars. With 24 combat squadrons, totaling about 300 aircraft, it possesses reconnaissance and conventional combat capabilities. [ref, 70: p. 47] Some of its forces have an atomic delivery capability and are available for nuclear engagement as part of NATO's deterrent strategy (Under the double key system the nuclear weapons supplied by the

United States may only be used after approval by the President). The Luftwaffe's role is more tactical than strategic in that operational space extends from the Baltic Straits in the north to the Alps.

The aircraft types used in the air force are "Phantoms" (RF-4E for reconnaissance, F-4F as fighter and fighter-bombers), the FIAT G-91 (ground support), and the F-104G "Starfighter." The "Alpha" jet (a Franco-German aircraft) and the MRCS "Tornado" (produced jointly by Germany, the United Kingdom, and Italy) will respectively replace the FIAT G-91 and the F-104G. As well as combat aircraft, the Luftwaffe contains air defense units including twenty-four surface-to-air "Nike-Hercules" missile batteries and thirty-four "Hawk" batteries.

[ref. 71: p. 4]]

All the combat elements of the Luftwaffe are earmarked for assignment to the responsible NATO commander in the event of war, and the air defense units are under NATO's operational control in peacetime. Other combat forces will come under the operational control of NATO upon declaration of a certain state of alert, while certain sub-units are on quick reaction alert under NATO's operational command in peacetime. The remaining forces are placed under national command and will fulfill their mission under this command. [Ref. 71: p. 4]]

This brief summary of the capabilities of the West German armed forces must be supplemented by the realization that the defense of the Federal Republic goes hand-in-hand with the defense of Europe--with that of all the member countries of the alliance. The defense capability of the Federal Republic takes on additional importance as Atlantic Alliance forces quantitatively erode and Soviet conventional capability grows. This effect may be exacerbated if certain American reserve troops presently earmarked for use in NATO have to be used elsewhere.

In addition to the armed forces of the Bundeswehr, the Federal Republic contributes to the defense of Europe by the maintenance of a growing arms industry. While this industry (which was non-existent in 1955) still labors under both psychological and political constraints due to the limiting protocols of the Paris Agreements, a vast reservoir of German technological expertise continually contributes to its growth. Since the 1960s, West Germany has forged for itself a prime position in the field of conventional weapons, particularly in the construction of fast patrol boats, armored vehicles (of which the "Leopard" and the "Marder" are the best-known examples,) in the electronics field (radars, missiles, etc.) and finally in a rebirth of the aircraft industry in the form of international cooperation with the Alhpa jet and particularly the MRCA. [Ref. 70: p. 101]

Of great potential importance is West Germany's construction of conventional submarines, which have received increased attention lately for specialized roles because of their relative cheapness in comparison with nuclear powered submarines and their manoeuvrability and low probability of detection. Since the United States has discontinued the construction of conventional submarines, the West German program, which has the highest export rate of all European submarine builders, takes on added importance. The Federal Republic has built 32 submarines for the Bundesmarine and 49 boats for export to eleven countries since 1945. [Ref. 72: p. 65]

In a related development, the Council of Ministers of the Western European Union (WEU) lifted the tonnage limitation of 450 tons standard displacement on West German submarine construction. [Ref. 72: p. 66] Additionally, the WEU lifted the tonnage limit on construction of German warships which had been in force since 1954. This measure came in response to the Bonn government's request in order to stop discrimination against West German shipyards in the military sphere. Federal Republic shipyards can now accept orders from abroad like their competitors and also have a free hand in technology development. [Ref. 73: p. 5] These developments, in addition to having a favorable effect

on the West German economy, may be of potential long-term importance for Western defense interests. As the traditional Western maritime powers assume added responsibilities outside of NATO, West Germany may be called upon to increase its naval role in the Atlantic. A stronger West German military shipbuilding industry would then be a welcome asset.

Economically, the Federal Republic has traditionally carried a heavy share of the NATO defense burden, ranking second behind the United States as the largest contributor to the aggregate defense effort. Additionally, West Germany has been the only member nation besides the United States to provide defense assistance to Turkey and Greece since 1964 and Portugal since 1978. Consisting of the supply of new and used equipment, the total value of this assistance by 1979 was DM800 million for Turkey, DM267 million for Greece, and DM34 million for Portugal. In addition, Greece and Turkey received, free of charge, several deliveries of equipment discarded by the Bundeswehr. [Ref. 64: p. 278]

The above measures do not entirely reflect the scope of West German contributions both militarily and economically to Western defense in Europe. In addition to such intangibles as alliance morale and confidence, the Federal Republic adds its economic weight and prestige within other forums such as the OECD, EEC, and

the IMF and contributes to Western military capabilities through participation in many multinational weapons development programs which increase overall alliance effectiveness through greater standardization of equipment. Despite these achievements and contributions, alliance partners (specifically the United States) will expect more in the future.

Because the general strategy for meeting extra-regional threats to Western security in areas such as the Persian Gulf has increasingly translated into American troops and equipment and European money, West Germany is expected to contribute by assuming a major role in filling the gap left by the diversion of American military and economic assets overseas. The broad outline of American expectations was reflected in a communiqué issued after the April 14, 1980 meeting of NATO's Defense Planning Committee. [Ref. 74] The measures delineated generally consisted of an increased emphasis and urgency to complete plans formulated previously under NATO's Long Term Defense Programme (LTDP). Among the most important measures proposed was an increase in munition stocks. The United States has the largest stocks in the alliance and has urged the European allies to increase theirs. The communiqué also stressed the need for more adequate airlift in the event of a crisis, including programs to assist the United States in

an airbridge to the Persian Gulf area. The United States is planning to include U.S. civil aircraft and believes that the West Europeans could at least draw up similar plans. Improvement of European infrastructure was proposed as well as an increase in the availability of forces in an emergency. Finally, the communiqué called for an increase in defense spending, and West Germany will be called on to contribute its traditionally large share.

2. West German Capability in the Persian Gulf Area

The concept of "division of labor" between the NATO allies in response to the problems posed by events in the Persian Gulf area has taken on a politico-economic as well as a military meaning. It is primarily within the political and economic spheres that the Federal Republic has proposed to contribute to the Western effort, both on the southern flank of NATO and outside the boundaries of NATO. It is within this framework that the Federal Republic has proposed to provide more economic and military aid to Turkey, to provide economic aid to help stabilize Pakistan, to embark on a plan of political and economic cooperation with the Persian Gulf states within the framework of the European Economic Community, and as was previously discussed, to relieve her allies of some of the military

and financial burden in Europe if they become involved militarily in areas of conflict outside of Europe.

a. West German Efforts in Turkey

Of all the NATO allies West Germany is considered to have the best relations with Turkey. This relationship has increased in significance since the Soviet invasion of Afghanistan, the Iranian Revolution, and the Iran-Iraq War. Turkey is important to Western interests not only for its strategic position, which is vital for the defense of the upper Persian Gulf, but because of its membership in NATO.

From a geographic standpoint, Turkish air bases are well placed strategically. For example, with the F-111F, strike missions could be carried out to cover the important sources of a potential Soviet attack on the upper Persian Gulf proceeding from the Transcaucasus and Transcaspian regions in the Soviet Union. These same aircraft could reach all important destinations in the upper Persian Gulf, and F-15s with conformal tanks could perform intercept as well as strike missions that far. For most Western aircraft with shorter combat radii, Turkey might offer the only bases from which the origins of a Soviet attack could be reached. [Ref. 75: p. 66] Moreover, while it might take many hundreds of millions of dollars to bring bases in Oman, Somalia, and Kenya up to NATO standards, Turkish

bases are basically up to NATO standards now, and several also have the advantage of association with NATO air defense ground environment stations. (NADGE).

The strategic geography of Turkey and the precedent for use of joint mobile forces in NATO, such as the ACE mobile force, and STANAVFORLANT, might make it possible to exercise land-based aircraft of European NATO countries in Turkey on a frequent basis and to do so without going outside the formal treaty boundaries during the exercises. Even the West Germans, who feel especially constrained politically on the movement of military forces outside the FRG, have frequently in the past used Konya range in eastern Turkey for pilot training because of the lack of airspace for training pilots above their own territory. [Ref. 75: p. 75] The presence of a multinational European-U.S. air contingent within range of the Persian Gulf could be a valuable political asset for demonstrating alliance solidarity and determination in the event of a potential crisis in the Gulf area and might serve as a deterrent to Soviet aggression. Such a contingent could be quickly moved to eastern Turkey as a diplomatic signal without the difficulties inherent in a similar move outside of NATO's formal area.

In addition to her geostratigical position, Turkey is important because her own armed forces could contribute to the defense of NATO interests in the Gulf

region rather than merely supplying facilities for the use of others. Also, there are significant indications that the Turks would be in the forefront of a broader interpretation of NATO's concerns today. The Turks allowed the use of Incirlik in connection with the Jordanian crisis in September 1970; and a number of influential Turks have made clear their understanding that, like other NATO countries, they would be critically affected by Soviet aggression in the Persian Gulf because oil from the Gulf is as essential for Turkey as it is for the rest of NATO. Turkey is more affected than any other NATO country in that such aggression would involve its immediate neighbors.

The attitude of Turkish officials was displayed in a mid-August 1980 report in Tercuman of an "important change in Turkish foreign policy determined jointly by the General Staff and Foreign Ministry." [Ref. 75: p. 65] The report stated that the Soviet invasion of Afghanistan could be considered as marking the beginning of a tendency to move down to the oil regions. Adding, however, that no one at the moment knows the next Soviet step, the Foreign Ministry officials stated that it is out of the question that the United States can use Turkey as a springboard for an attack in the Middle East. However, if the Soviet Union attempts to move down to the Persian Gulf, this would prejudice Turkey's interests. Turkey would then act jointly with

its allies because, having occupied the Gulf, the Soviet Union would certainly threaten Turkey's oil supplies. The report added that, according to the authorities, technical work has begun in view of such a probability.

As the preceding report and other indications imply, it is unlikely that Turkey would wish to involve itself bilaterally with the United States alone in military action in the Gulf area, but a Turkish response is much more likely under an alliance cover involving other West European nations.

Turkey has therefore become a key state in the NATO alliance not only because of her previous importance for defense of the eastern Mediterranean, but because of the potential danger to Western interests in the Persian Gulf. Unfortunately, Turkey is one of NATO's poorest countries. The inflation rate has exceeded 100 percent, and one of every four Turks is jobless. The Cyprus war was expensive; and even in peacetime, Turkey's 485,000 troops constitute a major expense for a poor country. For these reasons and as a result of the United States arms embargo since 1974, the Turkish armed forces are obsolescent and in extremely poor repair. For Turkey this situation has been worsened by the ever-increasing price of raw materials. Nearly the entire export profits of the Turkish economy are presently spent to finance the import of crude oil and other energy sources. [Ref. 76: p. 19]

West Germany has long granted defense assistance to Turkey, a policy which has its roots in a recommendation of NATO's Council of Ministers in March 1962. This assistance has been granted within the framework of Article 3 of the North Atlantic Treaty in which the allies have pledged themselves to mutual assistance. In the context of ten agreements from 1964 to 1979, Turkey received from the Federal Republic defense assistance, material supplies, and services to the value of DM800 million. [Ref. 76: p. 19]

The Turkish military is capable of absorbing a great deal of military assistance, but the economy needs a boost as well. At a meeting in Guadeloupe on January 7, 1979, the Federal Republic accepted the task of coordinating economic aid via the OECD to Turkey. Since the Soviet invasion of Afghanistan, Bonn has made this task one of the centerpieces of her efforts to contribute to the strengthening of Western defenses in the Middle East and Persian Gulf area. Bonn therefore pledged to give Turkey further aid from its development budget as well as aid for military expenditures in addition to the supply of military equipment (mainly anti-tank equipment and ammunition) and food supplies. Most of these stocks will come from Bundeswehr supplies, which will provide 80 percent new material and 20 percent used material. The Bonn Ministry of Defense estimates

the value of this aid between DM380 and DM560 million.

[Ref. 77: p. 3]

As an initial measure the Federal Republic made provisions for the immediate transfer of 60 Leopard-I tanks to Turkey, to be supplemented by armored personnel carriers, trucks and trailers, machine guns, anti-tank systems, cobra missiles, and more ammunition. The Bundesmarine will contribute small craft, tugboats, and fuel transporters. Bonn was quick to point out that the total measures envisaged in the arms sector would necessitate an increase in the defense budget of some DM1 billion, [Ref. 78: p. J1] and that the total package of aid to Turkey would likely amount to several billion DM and would be at the expense of planned tax relief in 1980 and 1981. [Ref. 77: p. 2]

In addition to these measures, Bonn has been active in a diplomatic effort to encourage the participation of the Gulf oil shieks in the Turkish financial rescue operation. In line with these activities the Federal Republic's financial minister, Hans Matthoefer first met with his Saudi Arabian opposite number in Febraury 1980 to probe this possibility. The appeal was not only for money, but also for cheap oil. [Ref. 79: p. 6]

As this discussion has pointed out, the Federal Republic has assumed a major role in the West's attempt to rejuvenate and stabilize Turkey after the

Soviet invasion of Afghanistan. This is a task for which West Germany is particularly well suited because of Germany's historic friendship with Turkey since the time of the Ottoman Empire and West Germany's position as Turkey's most important trading partner.

b. West German Efforts in Pakistan

The Federal Republic pledged to play a leading role in providing economic aid to Pakistan but refused to take part in arms deliveries. West Germany has promoted the view that India has a crucial role to play in surmounting the Afghanistan crisis and stabilizing the Middle East. Bonn, therefore, has reiterated its intention of doing nothing in the Middle East that might lead to an aggravation of the situation, especially anything that might exacerbate Indo-Pakistan differences.

Nevertheless, since Bonn first embarked on development aid, Pakistan has received DM 1.9 billion in capital aid or aid promised, DM 150m in technical assistance, and nearly DM 54 million in food aid. Bonn has also provided some DM26 million in aid to Afghan refugees in Pakistan. In spite of Bonn's refusal to lend direct military assistance to Pakistan, the Federal Republic drew up plans to foot the bill for four Airbus aircraft for Pakistan which were ordered in the FRG prior to the Soviet invasion of Afghanistan. The funds thus released

will be used by Pakistan for different purposes, meaning defense purposes. [Ref. 30: p. 1]

c. Cooperation With Persian Gulf States

The Federal Republic of Germany shares the general West European view that long-term stability in the Persian Gulf region will depend more on political and economic factors than on the deployment of military power. Moreover, Bonn has consistently sought to portray her participation in Middle East and Gulf diplomacy as part of an overall European effort. This policy has been pursued in an attempt to shield the Federal Republic from being singled out for conducting anti-Israeli or anti-American policies.

Nevertheless, the West Germans have been active in cultivating greater political and economic cooperation with the Gulf states and in the Middle East. In Iraq and other Islamic states where significant American presence is impossible because of American association with Israel and the former Shah of Iran, Foreign Minister Genscher, Franz Joseph Strauss, and Chancellor Schmidt, among others, have been trying to establish personal links with Arab leaders such as Saddam Hussein of Iraq as well as participating in the much-criticized meetings between FDP member, Jurgen Mollemann, SPD leader Willy Brandt, and PLO leader Yaser Arafat. [Ref. 81: p. 1]

Foreign Minister Genscher has repeatedly visited Arab capitals in the Gulf region in an effort to further political and economic cooperation between the EEC and the Arab states, including Iraq. West Germany has strong ties with Iraq--itself emerging as a majority military power in the Middle East--based on ties formed when Germany built the Berlin-Baghdad Railway around the turn of the century. Bonn officials now believe they have good contacts in Iraq and potential influence in that state. [Ref. 82: p. 69]

The efforts to cultivate relations in the Gulf have been especially apparent in Saudi Arabia. Part of this motivation is the fact that Saudi Arabia is the Federal Republic's main oil source and also its main creditor. The Saudis have expressed interest in weapons and arms from West Germany, especially the Leopard tank, and have hinted that the basis for business between the two countries may disappear unless this business includes arms sales. For Saudi Arabia, weapons from Europe are a symbol of independence from U.S. supply; and even though Bonn has so far resisted Saudi pressure to alter its restrictive arms transfer policy, it would not be surprising to see the West Germans sell the Leopard tank to the Saudis in the future. [Ref. 83: p. 1]

Most West German arms transfers which provide potential influence in the Gulf region travel by much less

conspicuous routes through the export of plants and licenses, foreign assembly arrangements, and multinational projects. An example of these procedures is the Italian main battle tank called the Lion, which is a copy of the German Leopard and the Marder APC, both of which are eagerly sought by Arab countries. Other multinational projects such as the Milan, HOT, and Roland missiles, and the Alpha jet and Tornado (MRCA) offer the same possibilities for potential sales to Arab countries despite West Germany's restrictive arms sale policy.

[Ref. 84: p. 251]

The final source of potential West German influence in the Gulf area and the Middle East is the position the Federal Republic has taken in the Arab-Israeli conflict. Here again the Federal Republic has identified itself with the European Community position, which advocates a homeland for the Palestinian people. West Germany historically has shown a great deal of deference to the Israeli position and to U.S. policy. However, Bonn officials have clearly stated their criticisms of Israel's policy of establishing settlements on the West Bank. Early in his Chancellorship, Helmut Schmidt stated that he did not attach greater importance to Israel's right to exist than to the legitimate rights of the Palestinian peoples. [Ref. 85: p. 1] West Germany's increasingly pro-Arab stance has put Bonn's

relations with Israel under strain and has created the impression that her policies are motivated primarily by oil interests, but nevertheless these same policies may provide the West much-needed political leverage in this area.

d. West German Military Capabilities in the Persian Gulf Area

The idea of Bundeswehr troops engaging in a military conflict in the Persian Gulf area or of West German warships forming part of an international force to patrol Western oil routes is not very realistic for several reasons. First, West German armed forces are basically equipped and oriented toward a conflict in Europe where NATO assets are already scarcely adequate. Second, and perhaps more constraining, is the political legacy of German militarism remaining from World War I and World War II. Even though few nations, except for those in the Western camp, vigorously protest the presence of East German troops outside of the GDR, it still remains almost impossible for West Germans to contemplate a more active military role abroad.

Despite this pervasive feeling in West Germany, several writers after the events in Afghanistan questioned whether it was not possible to at least lend the United States a symbolic hand. Noting that by Article 87a of the Basic Law (the 1949 Federal Constitution)

the Bundeswehr may only be deployed abroad on active service for immediate defense purposes, Hans Schueler pointed out that by Article 24 of the same document, the Federal government is entitled to join a system of collective security to keep the peace (the constitutional provision empowering the government to join NATO.) Article 11 of the 1974 Ottawa Declaration states that the common interests of NATO countries may be affected by events in other parts of the world. Based on these interpretations, Schueler concluded that there is no reason to assume that it is unconstitutional for the Federal Republic to join an international naval peace-keeping force in the Gulf region in times of crisis, nor is there any reason to behave as though the Federal Republic has its hands tied by NATO. [Ref. 86: p. 2]

Although this is not a widely shared view in West Germany, in April 1980, three months after the Soviet invasion of Afghanistan, the Bundesmarine sent a flotilla (two destroyers and supply ships) to the Indian Ocean. These vessels made port visits and took part in joint exercises with American vessels. [Ref. 87: p. 3] West German officials quickly pointed out that this naval visit to the Indian Ocean was planned prior to the events in Afghanistan and should not be construed as a move toward a more expansionist policy. In spite of these official disclaimers, this wider recognition of mutual

interests in the area by a major European power is a positive development.

3. Constraints on West German Capabilities

The Federal Republic faces several important constraints on her ability to influence situations within the international arena. Some are uniquely related to her historical experiences of defeat in two world wars, while others, primarily those of an economic nature, are common to most Western industrial states. In general, West Germany faces economic and manpower problems which could potentially inhibit her ability to apply leverage either in Europe or overseas. In Europe, the existence of East Germany as a hostage to the Soviet Union and the related policy of Ostpolitik place severe limits on Bonn's political flexibility. The recent growth of neutralist and pacifist segments within the West German population further inhibits government flexibility. In the Persian Gulf region, West Germany's traditional relationship with Israel and her energy dependency on the Arab states force Bonn to steer a middle course between pro-Western policies which may run counter to Arab interests and pro-Arab policies which suggest an impression of endangering Israel's security.

In many respects West Germany is a prisoner of past economic successes, West Germans are used to an annual increase in real national income and current

governments are held to an accounting which they cannot avert by making comparisons with the economic performance of their neighbors. Seen from abroad, the Federal Republic's high living standards and low inflation rate probably look as enviable as ever, but on closer inspection this image has become somewhat tarnished. The German mark still ranks next to the U.S. dollar as the most important currency in world trade, West German inflation and unemployment remain relatively low (4-5 percent per year and 3-4 percent, respectively), and the West Germans enjoy one of the highest per capita annual incomes; and yet there are clouds on the horizon.

[Ref. 88: p. 195]

The Federal Republic is facing an economic growth slowdown, increased unemployment, and high balance of payments deficits. From 1978 to 1980, West Germany's balance of payments current account swung from a DM 17.5 billion surplus to a DM 28 billion deficit. [Ref. 89: p. 21] Because West Germany is remarkably vulnerable to world trade conditions, there are severe limits on what Bonn can do about these terms of trade or the price of oil, the chief factors in this plunge. Naturally, these economic problems have had an impact on defense spending.

The senior partners in West Germany's ruling coalition, the Social Democrats, espouse a reformist policy in which social programs enjoy the highest priority.

The SPD is thus reluctant to sacrifice social gains for increased defense spending. The Christian Democratic opposition is more inclined to do so, though such a shift in emphasis would be somewhat controversial in their ranks as well. As a result, the 1979 Defense White Paper projected that defense spending in the medium-term financial plan for 1980-1983 would fall well below the 3 percent increase in real terms sought within NATO's Long Term Defense Programme, and the figures projected for 1980-1983 meant that the defense budget as a whole would take the smallest portion of any federal budget over the past two decades. [Ref. 64: p. 276] Among other measures, the decrease in defense spending has forced cutbacks in pilot training flights and stretches or curtailments in programs such as the Tornado and the Roland II.

This cutback in West German defense spending rates is exacerbated by the Federal Republic's low birth-rate, one of the lowest in the world. In 1977, the Bundeswehr took in some 232,000 conscripts against an annual requirement of roughly 250,000. By the end of the 1980s, under the same system the number will be down to less than 200,000 and the projection for 1997 is 133,000. [Ref. 90: p. 5] These figures and the level of defense spending illuminate problems concerning West Germany's preferred role within a Western "division of labor."

The Federal Republic, in addition to economic constraints, faces difficult political problems which limit her room for manoeuvre. In Europe, the results of two world wars have created a lingering distrust of the Federal Republic among her NATO allies, as well as distrust and fear among her Warsaw Pact opponents. For this reason Bonn faces the perpetual dilemma that most of her actions designed to ameliorate tensions with the East, such as the policy of Ostpolitik, create apprehensions among her NATO allies. On the other hand, acts of solidarity with her NATO allies quickly elicit threats and vituperation from the Soviet Union and the East European communist bloc. This dilemma is compounded by several other realities of the post-war European situation. First, the Soviet Union by virtue of her control of East Germany, has great leverage over West German policy. Second, the Federal Republic's European NATO allies, although content to see West Germany help NATO constitute a military counterweight to Soviet power, are extremely reluctant to allow the Federal Republic to dominate Western Europe, either militarily, economically, or politically. This is especially true of France. This complex situation often impels Bonn to walk a political tightrope and limits her capacity for political influence in Europe.

Ironically, this same complex situation has contributed to the current situation of fear among Americans and West Germany's European allies of a new West German trend toward drift, neutralism, and new, left-wing nationalism. Public protest against the current Long Range Theater Nuclear Force (LRTNF) modernization, the neutron bomb controversy, and new outbreaks of terrorism have created questions among Bonn allies as to her reliability in the future. This recent trend toward neutralism, either real or perceived, undermines West Germany's political stock in the United States and among her European allies, such as France.

Political dilemmas also characterize West German policy in the Middle East and Persian Gulf area. The feeling still exists in the Federal Republic that ensuring the survival of Israel is both a necessity and a historic obligation. This notion is counterbalanced by a realization that West Germany is critically dependent for energy on Arab states such as Saudi Arabia, which marches in the front ranks of the anti-Israeli Arab coalition. These factors force Bonn to perform a balancing act in the Middle East. This often results in adamant public statements by Bonn politicians stressing their commitment to Israel concurrent with pro-Arab policies cloaked within European Community policies.

B. WEST GERMAN POLICY AND INTENTIONS

Unlike the case of France, there is little ambiguity concerning West German reaction should hostilities break out in Europe. As the most valuable Soviet objective in Western Europe, the Federal Republic would most likely be the prime objective of aggression, in which case immediate armed reaction by the Federal Republic would not only be a fulfillment of alliance pledges, but a necessity for national survival. Additionally, West German armed forces are essentially integrated under NATO command. Therefore, considerations of West German intentions concerning the protection of Western oil supplies center around the question of her contribution to short and long-term improvements to Europe's defense and her support of extra-regional deployment of assets by her allies. A discussion of this question must be prefaced by an examination of West German foreign policy--in particular, the notion that West Germany is expanding her global role and assuming a greater independence of decision-making within the Western alliance. An examination of the Federal Republic's reaction to the Soviet invasion of Afghanistan, in order to provide some indications of probable West German behavior during future extra-European crises, will conclude this section.

1. West German Foreign Policy

A West German journalist recently expressed the view that "the French withdrawal from NATO, British economic weakness, and the weakness of U.S. leadership meant that Bonn has virtually been an equal partner of the U.S.A. since the mid-70s." [Ref. 91: p. 2] Although the latter portion of this statement may be an exaggeration, the Federal Republic has come to play a much more important role not just within the alliance, but on the world stage in general. For our purposes it is important to examine the roots of this changing foreign policy and the probability of West German acceptance of U.S. views on how to best protect Western interests in Europe and in the Persian Gulf region.

The presence of the Federal Republic has been more fully felt in international organizations, in the councils of the Atlantic Alliance, in the Third World, and in the East, but this new assertiveness has been incremental and generally limited to the political and economic spheres. Typical of West Germany's new recognition, as not merely a follower but a leader, was the January 1979 summit at Guadeloupe where for the first time the "Big Three" of the United States, Great Britain, and France, was enlarged to include the West Germans. In a like manner, today few European initiatives are taken without prior consultation and agreement between Paris and Bonn.

Bonn has increasingly promoted the idea that the Federal Republic has world-wide security interests that transcend the narrow bounds of NATO, even though the Federal Republic may be limited in her military commitments. Thus in the aftermath of the Afghanistan invasion, West German officials were actively engaged in diplomacy in Japan, Australia, and New Zealand, as well as the Middle East and Gulf states. West Germany has also been increasingly moving into such traditional U.S. diplomatic preserves as Saudi Arabia and Central America, and Chancellor Schmidt likes to take credit for restraining the United States from imposing serious sanctions on Iran, and thus indirectly for part of the progress that took place toward the release of the U.S. hostages. [Ref. 82: p. 70]

In the economic sphere, despite recent setbacks, West Germany's ability to cope with the energy crisis, unemployment, and inflation has been the envy of the Western industrial powers. It is noteworthy that West German economic strength was one reason why in 1969 French President Georges Pompidou gave the go-ahead for Britain and other countries to join the EEC in an effort to counterbalance West German economic strength. Nevertheless the political and economic dominance of the Federal Republic is much greater within the EEC today than it was thirteen years ago. In business West Germany

is becoming the biggest exporter of all industrial nations--exporting not only goods but money, management, and technology. Perhaps the most striking example of Bonn's new-found independence was Chancellor Schmidt's ability to pour cold water on Washington's plea four years ago for the Federal Republic to massively stimulate her economy to act as a "locomotive" for other Western economies. [Ref. 82: p. 69]

Finally, Bonn's new assertiveness has been evident within the Atlantic Alliance, where the Federal Republic has recently been seeking more command authority. In the summer of 1977, Bonn officially requested that more senior appointments in NATO be reserved for West German officers. Bonn pointed out that Great Britain, despite its sharply curtailed contribution to the Alliance, receives some 40 percent of the top command and staff positions (a percentage equal to the United States), while little more than 10 percent of the total was reserved for West Germans. NATO officials agreed, and as a result, more senior posts are being allotted to the Bundeswehr. The post of Deputy to the Supreme Allied Commander, previously reserved for a British officer, is now shared with a West German General. [Ref. 92: p. 106]

It is possible to identify several factors which constitute the roots of this more assertive West German foreign policy. Among the most important are the quest

for reunification and the policy of Ostopolitik, the growing lack of confidence in the United States with the resultant increase of bilateral U.S.-FRG tensions, and the growing sense of West German economic vulnerability. These factors are interrelated to some degree and tend to form a vicious circle, with increasing divergence between American and West German policies. For example, it is difficult to establish whether Bonn's policy of Ostopolitik has driven a wedge between U.S. and FRG policies or whether differing U.S. and FRG policies have created more manoeverability for West German Ostopolitik. The same can be said of the latter two factors mentioned above. The more assertive West German foreign policy has altered the strict leader-follower relationship that has characterized Washington-Bonn relations in the past.

The 1979 Federal Republic Defense White Paper states that "The Federal Republic of Germany continues to pursue her declared intention of working for a state of peace in Europe in which the German people will regain their unity in free self-determination." [Ref. 64: p. 47] As this statement emphasizes, the Federal Republic views peace, or detente, as the precondition for a convergence of the Germans. In spite of the immobility of the past three decades, the Germans have never lost sight of the goal of reunification. Chancellor Schmidt is fond of remarking that it once took the Poles 200 years to

reunite--but reunite they eventually did, and so, he says, will the Germans. Schmidt has otherwise remarked that,

I do not foresee under what auspices and conditions the Germans will get together again, but they will. Maybe only in the twenty-first century, I don't know. It would obviously be wrong for any European nation to believe that the nation-state is normal for any nation, but not for the Germans. [Ref. 93: p. 54]

The goal of reunification, the driving force behind Ostpolitik, has resulted in continuous efforts by Bonn to befriend East Germany and keep open relations with the East Germany government and its Soviet political masters. This desire at times seems to dominate West German geopolitical thinking. The policy of detente for the Federal Republic has created many advantages during the last decade, but it has not been without its pitfalls.

Bonn's Ostpolitik first emerged during the Chancellorship of Willy Brandt and was aided, and even encouraged, by the United States, which was taking tentative steps toward better Soviet-American relations. The renunciation of force agreements with Moscow and Warsaw in 1970, the Basic treaty between the two German states in 1972, and the 1971 four-power agreement on Berlin paved the way for increased contacts between the West Germans and the East.

Unlike the United States situation, detente for West Germans has provided many visible advantages and thus makes its presence felt in domestic politics. The domestic consideration that Ostpolitik formed the single

most significant achievement of the SDP/FDP coalition since 1969 led to the government's natural desire to prevent any negative repercussions of extra-European conflicts on the domestic West German partisan debate. Ostpolitik has succeeded in political, human, and material terms. During the last few years this policy has produced more human contact between the two Germanys, an improvement in the Berlin situation, and a yearly increasing influence of Bonn in West and East Europe. Millions of West Germans have been allowed to visit the GDR, and a larger number of East Germans have travelled West than ever before. In purely humanitarian terms there has been a marked amelioration of contact between the Germanys. On the more materialistic plane, the initiatives of Ostpolitik ushered in a period of increased trade between the Federal Republic, the Soviet Union, and the East Bloc.

However, these gains from Ostpolitik have not come without sacrifices on the part of the Federal Republic. The Soviets have tried to woo and bully the Federal Republic and especially during times of tension have made a finely calibrated use of the carrot and stick approach through the East German government. Thus, in 1980, during the Polish crisis, the East Berlin government initiated a policy which drastically limited contacts with West Germans by increasing the mandatory exchange minimum

(which is in effect an entrance fee for visitors from the West) to DM 25 per day and person. Thus, a family of four has to pay DM 100 (roughly \$45) to the East Berlin government if it wishes to spend a day with relatives in East Germany. [Ref. 94: p. 180] This policy has halved the number of West German visitors to the East; and as always, East Berlin does not allow East Germans to visit the West, except the elderly and in exceptional cases.

In addition, Bonn quietly continues to buy the liberty of East Germans who are permitted to leave. These payments to the GDR totaled 56 million dollars in 1977 and continue at that annual rate. A Berlin human rights group estimates that the going price is 12,000-15,000 dollars per person. Yet East Germans are netting much more than the proceeds of this "body trade" in their dealings with Bonn. The East owes West Germany 2.25 billion dollars in the so-called inner-deutscherhandel, the open-ended barter trade between East and West Germany. In the summer of 1980, Bonn extended an additional 293 million dollars in aid to build roads and canals between the two countries. [Ref. 95: p. 42]

Despite these efforts by Bonn, the Soviets, after the invasion of Afghanistan, cancelled a number of detente-oriented meetings, hinted at cutbacks in trade between West Germany and the COMECON countries (the value of which is now approaching that between West Germany and

the United States), and issued veiled hints that access to Berlin might again be impeded. The events in Poland in 1980 forced Chancellor Schmidt to cancel a long-awaited summit between East and West Germany when the East German communist leader, Erich Honecker, refused to let him visit the Baltic port of Rostock.

The gains from detente and the sacrifices that Bonn is willing to endure underline the commitment of the Federal Republic to its Ostpolitik. The Eastern policy which Brandt launched in 1969 set the stage for a more active Westpolitik, and the successes of Ostpolitik must have diluted somewhat the political importance of NATO from a West German perspective. As long as reunification remains as a German aspiration, the ingredients for potential deals between Bonn and Moscow remain, but this does not entirely release West Germany from military dependence on the United States and the Atlantic Alliance. This latter fact serves as a check on West German international assertiveness, but does not eliminate it. For by whatever standards of past or present, the division of Germany is almost unalterable. The peace of Europe was built on it, and no one, including the United States, is likely to jeopardize this condition. As the process of detente in Europe evolves--as it has evolved in spite of periodic setbacks--West German foreign policy may be increasingly less inhibited by her military vulnerability.

Bonn's Ostopolitik will maintain a growing freedom of action between the East and the West.

The second major facet of Bonn's new assertiveness is the growing lack of confidence in the ability of the United States to guarantee the security of West Germany, and the increasing number of bilateral disagreements between the United States and the Federal Republic. Since the signing of the London and Paris agreements in 1954, and later the Nuclear Non-proliferation Treaty in 1969, West Germany has relied on the U.S. nuclear umbrella for security. Understandably, even minor controversies concerning American nuclear weapons policy have profound effects in Bonn. Bonn watched with apprehension the developments during the SALT negotiations, fearing that the results would fail to safeguard the interests of NATO. The problems associated with Long Range Theater Nuclear Force (LRTFN) modernization and the periodic controversies over the enhanced radiation weapon (ERW) have also contributed to Bonn's loss of confidence in U.S. political wisdom. The role of theater nuclear weapons on West German soil also leaves questions in West German minds. For the Federal Republic these weapons represent an additional in-theater deterrent, a link to the U.S. strategic deterrent, and a symbol of the U.S. defense commitment to West Germany. They are clearly not thought of as war-fighting weapons.

As a result of many events, West German confidence in the United States as a fundamental pillar of Western defense was weakened over the past decade and visibility shaken by 1979. The overthrow of the Shah of Iran coming as it did on the heels of increased Soviet-Cuban adventurism in Africa and a general concern over what appeared to be America's post-Vietnam refusal to take risks in defense of vital interests contributed to this feeling. After Afghanistan, West Germans wondered about U.S. leadership and military capability at a time when the U.S. began pursuing a tougher policy toward the Soviet Union. Some even attributed President Carter's get-tough policy to domestic political pressures during an election year.

West German-American disagreements have broken out over economic policy, nuclear proliferation issues (the Federal Republic's proposed sale of a nuclear reprocessing plant to Brazil), and weapon standardization--which the West Germans see as a facade to establish a one-way flow of American arms sales to Western Europe. Finally, Bonn has in the past chaffed over the perceived lack of alliance consultation on the part of the United States. For example, during the October 1973 Middle East war President Nixon ordered a global alert of American military forces without notifying the NATO allies until seven hours after the alert was initiated. Nor was Bonn provided any information about the weakening of NATO's combat readiness as a

result of American redeployment of armored units and F-4 aircraft or the shipment of U.S. weapons to Israel from the American pier at Bremerhaven. [Ref. 96: p. 474]

These examples of West German disappointment in U.S. policy and German-American disagreements are not presented to imply that bitter denunciations are about to break out on either side, nor to imply that U.S. policy was necessarily at fault in each case. The point to be made is that differences over a number of complex political, economic, and military issues have caused U.S.-FRG relations to seem more competitive than in the past. As a result West Germany has begun to seek greater freedom of action in the Atlantic Alliance and a larger leadership role in a more assertive European Community.

West German measures to preserve her economic achievements are the final major components of Bonn's more assertive foreign policy. Under Chancellor Schmidt, the Federal Republic has displayed an increased self-confidence in making its own decisions on how to best deploy her economic strength. West Germany's economic power can be compared to France's nuclear deterrent in that they both represent each nation's claim to status at the head of a group of medium powers below the two superpowers. Chancellor Schmidt has told his countrymen that, "at least in the field of international monetary affairs, West Germany can count itself a world power equivalent to the United

States." [Ref. 97: p. 118] In short, West Germany's economy is perhaps her major source of national power, one which Bonn will go to great lengths to protect.

In summary, it is apparent that the Federal Republic has increasingly put to rest the mocking description of West Germany in the 1960s as an "economic giant" but a "political dwarf." As a result the United States faces the risk that in the 1980s, West Germany will come to believe that realizing its identity requires a broad rejection of U.S. leadership. The Federal Republic remains dependent on U.S. military guarantees, but this does not translate to agreement on all aspects of American foreign policy. Perhaps not enough attention has been paid in the West to a recent statement by Mr. Schmidt in which he said,

One must admonish all who bear responsibility in German politics not to bind themselves one-sidedly to the decisions of another government but to the interests of their own people and their own state. That is the principle to be guided by. [Ref. 98: p. 23]

The U.S. should be concerned over how this new assertiveness will affect West German acceptance of the United States' views on how to best guard Western interests in Europe and in the Persian Gulf area.

2. Potential for Increased West German Contribution

In response to the Iranian revolution and the Soviet invasion of Afghanistan the United States moved quickly to increase the size of the American military

presence in the Persian Gulf area by the traditional method of increased naval power. The force levels that U.S. naval involvement reached in the ensuing months made it apparent that a continuous presence of this magnitude could not be maintained in the Indian Ocean without adversely affecting U.S. capabilities elsewhere. The military problem was further complicated for the West by its inability to quickly introduce substantial ground forces into the Gulf area. These problems immediately generated a debate within NATO concerning the geographical area of responsibility of the Alliance and the role of individual states in protecting Western oil supplies.

In West Germany, a few non-governmental observers aired the idea of West German warship participation in an international force to patrol the oil routes, and members of the opposition such as Manfred Woerner and Franz Joseph Strauss initially advocated an extension of NATO's defense area to include the Middle East. However the overwhelming consensus of opinion reflected that of European NATO as a whole--that the established boundaries of NATO must remain unchanged and that any military action or contemplated action should be conducted on a bilateral or multilateral basis between nations that have the specific interest and ability to act in extra-NATO contingencies.

After a Bundestag debate on January 17, 1980, both Chancellor Schmidt and Foreign Minister Genscher made it

clear that West Germany rejected demands for a wider NATO military role and that the Bundeswehr would continue to perform its traditional function in NATO's central region. On November 12, 1980, Admiral Harry D. Train, Supreme Allied Commander, Atlantic (SACLANT), gave an address to the Belgian Royal Institute of International Relations in Brussels on the theme of NATO's increasing maritime responsibilities. In this speech he emphasized that:

Article 4 of the NATO treaty which makes provision for inter-allied consultation is intended to stipulate the need for consultation in the event of threats in any part of the world, according to an informal agreed interpretation. This includes threats to the signatories overseas territories. Thus, though the defense zone of the treaty was limited to the North Atlantic area, the worldwide scope of the Atlantic powers' interests was recognized. Simply stated, there is no NATO border. There never was the slightest thought in the mind of the drafters that it should prevent collective planning, maneuvers or operation South of the Tropic of Cancer in the Atlantic Ocean or in any other area important to the security of the parties. Therefore, when I speak in terms of NATO's increased maritime responsibilities, I mean worldwide. [Ref. 99: p. 4]

In spite of this interpretation of NATO's area of responsibility, the role of the Bundeswehr and Bundesmarine is likely to remain confined to the European theater for the foreseeable future. Any multilateral military action in the extra-NATO areas will be left to the British, French, and Americans. Indeed, West German participation in militarily countering Soviet or other threats in the Persian Gulf will remain limited by the so-called "division of labor" concept.

The final communique of the Defense Planning Committee of NATO, meeting in Ministerial Session on 12-13 May 1980, spells out the concept of NATO's division of labor as follows:

The United States and other nations have already responded to challenges arising from situations outside the NATO area. Future deployment of the United States Rapid Deployment Force (RDF) to deter aggression and respond to requests by nations for help could involve possible changes in the availability of combat and support forces currently committed to NATO in a re-inforcement role. At the same time as the United States carries out its efforts to strengthen defense capabilities elsewhere, allied capabilities to deter aggression and to defend NATO Europe should also be maintained and strengthened. This situation only heightens the need for all allies to maintain levels and standards of forces necessary for defense and deterrence in the NATO area. [Ref. 100: p.]]

This statement followed a February 1980 statement by General Rogers, who in addition to being SACEUR is also Commander of U.S. forces in Europe,

The most visible function of U.S. troops lies with our integration into NATO's military command structure. However, the common and vital interests of the U.S. and Europe are secured only to the extent that the nations of the alliance join in an unreserved commitment to share not only the benefits but also the risks and burdens associated with our collective NATO effort. [Ref. 101: p. 1]

These words might be construed to imply that, if Europe was not forthcoming in her efforts to share the increased burden of Western defense, the United States might be forced to act unilaterally. The extent of European fear that U.S. ground forces currently stationed in Europe might be withdrawn to meet extra-European crises was illustrated

by the furor created over what was perhaps a loosely-worded statement by NATO Secretary General Joseph Luns in May 1980. Luns declared that "Europeans must come to terms with the idea of troop withdrawals by the U.S. from Europe in the event of an acute crisis outside NATO's theater of action." Upon his return to Europe, he quickly amended the term troop withdrawals to force withdrawals and stipulated that this meant that U.S. Naval units might be withdrawn from the North Atlantic and the Mediterranean. [Ref. 102: p. 2] Bonn's Defense Minister Hans Apel addressed this same issue in a May 1980 Eurogroup meeting, declaring that:

The U.S.A. has no intention of withdrawing troops in Europe for deployment elsewhere, but reserve troops in the U.S.A. for use in NATO may possibly have to be used in another region of the world. This is where the sharing of the burden comes in, i.e., on the basis of the NATO LTDP passed in May 1978, efforts will be concentrated initially on achieving the objective of developing European reserve units. [Ref. 100: p. 1]

As has been previously discussed, the Federal Republic at that time was already well on the way to establishing more and quicker reserve potential under the reorganization of the Bundeswehr. The overwhelming concern in West Germany was the potential withdrawal of U.S. troops and equipment from West Germany in the event of an overseas crisis.

Under the division of labor concept several official NATO sources have proposed that West Germany, among others, assume a greater share of the maritime responsibility in the Atlantic and Mediterranean in order to free American or

British units for duty elsewhere. In May 1980, during a joint meeting of NATO defense and foreign ministers the defense minister of the Netherlands proposed that a second allied naval squadron made up of units from Norway, Denmark, West Germany, Belgium, the United Kingdom, Portugal, and the United States, be formed in order to compensate for the increased responsibility of the U.S. in the Gulf region.

[Ref. 103: p. 1]

West German officials, as previously noted, have indicated that the Bundesmarine will operate only in the NATO area; however, military officials have discussed the possibility of assigning extra tasks to the West German navy. American officials are particularly desirous of seeing a larger role for the Federal Republic in helping to extend NATO naval presence south of the Tropic of Cancer, and these plans have already been publicly endorsed by some West German military spokesmen. [Ref. 96: p. 477]

Nevertheless, the assets for a larger West German role may be lacking. Although the Bundesmarine has ships with blue water capabilities, and undertakes occasional deployments beyond the NATO area, there are no current plans to increase the size of the Bundesmarine--new construction is entirely for replacement. Moreover, German naval officials stress that the Bundesmarine does not need larger warships than those under construction (the Fl22 frigate), which are commensurate with its sphere of mission--the Baltic and the

northern flank of Europe. [Ref. 104: p. 58] For this reason, additional West German naval contributions are likely to take the form of largely symbolic rotations of Bundesmarine units outside their traditional Baltic theater of operations.

The most substantial area of West Germany's contribution is likely to be improvement of Europe's defense under the guidelines of the LTDP. The Federal Republic is under pressure to effect prompt or accelerated implementation of such measures as increased readiness, reserve mobilization, war reserve munitions and material, support for reinforcing forces, and NATO's infrastructure program. German officials have indicated a willingness to assume these tasks, but insist that it must involve alliance-wide participation. Defense Minister Apel has commented,

If we are supposed to do something about ammunition stockpiling for example, then others must do that jointly with us. They must not rely on well-stocked German depots believing they need not make any financial sacrifices. [Ref. 105: p. 3]

The Federal Republic knows that it will have to shoulder still heavier defense commitments than in the past, notably in the so-called host-nation support program of logistic backing for American reinforcements. Thus, Bonn's military contribution largely becomes a question of increased military spending, over which much controversy has arisen.

Although West Germany's contribution to NATO must be measured in much broader terms than that which enters into the equation NATO uses under the three percent guideline established as part of the LTDP, this figure has been the center of much controversy between the United States and West Germany. After the invasion of Afghanistan, Washington began to press Bonn more forcefully to increase the Federal Republic's share of financial support for rapid reinforcement and readiness programs, including underwriting additional costs for U.S. troops in West Germany. While the request for additional funds has been part of NATO long range planning for several years, the U.S. proposals have come at a time when West Germany has been sliding into a recession with the government of Chancellor Schmidt looking at major cutbacks or freezing of a number of national spending programs, including defense.

Bonn quickly became upset by the close scrutiny of the Federal Republic's contribution to NATO and was quick to point out that its armed forces are the best in Western Europe and that, unlike the Anglo-American countries, its forces consist of highly motivated conscripts. West German spokesmen have criticized the three percent goal as "mechanistic" and have suggested that West Germany can best serve the alliance for the time being by improving its economic situation.

The controversy gained momentum in late October 1980, when spokesmen for the leading coalition parties, the SPD and the FDP, reported that as a result of preliminary budget talks the real growth of West German military spending would slow to about 1.8 percent in 1981. At the same time the defense ministry financial situation was deteriorating because of two factors: (a) the rise in fuel prices, which heavily affected West Germany's highly mechanized, gas consuming military structure, and (b) the cost explosion of the Tornado (MRCA) weapons system. The increased cost of the MRCA forced the West German air-force and navy to trim back and stretch other military system acquisition programs, and announcements were made that all spending programs would be frozen until 1984. [Ref. 106: p. 18] The cost increase for the Tornado came in the midst of a major West German defense expenditure program as part of the LTDP of NATO.

Following urging from the United States, as well as other NATO members and German military leaders, West Germany agreed in the beginning of 1981 to increase defense spending to a rate of about 6.2 percent over the 1980 defense budget. With adjustment for inflation this increase still fell below the NATO goal of three percent real increase. Preliminary plans for the 1982 defense budget proposed a nominal increase of 4.2 percent over 1981, which (with inflation in West Germany expected to be 4.5 percent)

equated to a zero growth in defense spending for 1982. Chancellor Schmidt commented that this figure was as a result of record high U.S. interest rates, which have contributed to a downturn in the West German economy. [Ref. 107: p. 26] This reduced military spending has resulted in a curtailment of several programs for 1982. In addition to a decreased number of training flights for air-force and navy pilots, the Bundeswehr has had to dip into peacetime strategic oil reserves to meet fuel needs and the rate of delivery of weapon systems such as Tornado and Leopard II, has decreased. The poor financial position of the defense ministry has led to the potential shortage of certain military equipment, including insufficient ammo stocks to cover the 30-day NATO requirement and a lack of electronic countermeasures equipment.

In October 1981, the West German cabinet voted to cut 1982 outlays even further, thus decreasing the nominal defense increase over 1981 from 4.2 percent to 3.6 percent. Defense ministry officials pointed out that this figure still represents a greater increase than the overall federal budget increase of 2.8 percent; but nevertheless Bonn was heavily criticized by the Reagan administration. [Ref. 108: p. 29]

The controversy over the "three percent solution" for NATO defense expenditures is a complicated one, and it is probably true that this rigid standard should be

de-emphasized. However, at a time when the division of labor concept is translating into European money and U.S. money and personnel, and when President Reagan is embarked on a massive build-up of America's strategic and conventional strength with resulting high defense expenditures, some difficult questions will be asked in Congress about allied defense spending, especially that of the Federal Republic.

3. West Germany and the Soviet Invasion of Afghanistan

The invasion of Afghanistan met with a mixed reaction in West Germany. Rather than serving as a "call to arms" or a rallying point for increased attention to such topical NATO imperatives as LRFTN modernization, reaction to the Soviet invasion included concern over American "over-reaction" as well as Soviet aggression. Fear of the destruction of detente and economic relations which had been tediously built up during the past decade, matched the fear of potential future Soviet aggression in areas such as Yugoslavia and Norway.

These opposing opinions were expressed by former West German Chancellor Willy Brandt and CDU defense spokesman Manfred Woerner, respectively. Brandt expressed the opinion that,

The Soviet intervention is a serious matter, But it shows that the world is still suffering from too little rather than too much detente and that we must do everything in our power to promote detente beyond Europe. In any event reason speaks against playing these events against the efforts to effectively limit armaments. [Ref. 109: p. 4]

Woerner, on the other hand, outlined a program of action that would clearly dovetail with the more hard-line American initiatives, including complete financial, military, moral, and political solidarity with the United States. More specifically, he called for protection guarantees for countries in particular danger (Pakistan, Saudi Arabia, Egypt, or Israel), intensification of relations with China, and an elimination of the geographic limits of NATO. [Ref. 110: p. 3]

The official policy pursued by Chancellor Helmut Schmidt represented a view between these two positions, but was nevertheless representative of the tough situation West Germany found herself in. Throughout the aftermath of Afghanistan, the Federal Republic sought to appear as a reliable partner with the United States while creating the impression that Bonn was using her influence on the United States to urge restraint over the invasion. Thus, Bonn joined the rest of Western Europe in publicly denouncing the Soviet action, but was much less forthcoming with respect to more tangible actions. The Federal Republic avoided taking an isolated stance against the Soviet Union by voicing her policies in conjunction with the French (after the Schmidt-Giscard summit of 5 February 1980) and within the EEC (British Foreign Secretary Carrington's proposal that Afghanistan be granted neutral status). Meanwhile, Chancellor Schmidt insisted on keeping open the

lines of communication with Moscow; and shortly after the invasion of Afghanistan met with Soviet leader Leonid Brezhnev, despite the misgivings of American leaders.

Americans were particularly disappointed with the reaction to President Carter's plan for economic reprisals against the Soviet Union. In the spring of 1980, there was a joke making the rounds in Eastern bloc politics to the effect that the Russians may have lost their last friends by invading Afghanistan, but the Capitalists have remained faithful to them. [Ref. 111: p. 6] This only half-facetious statement describes the lack of Atlantic solidarity which characterized President Carter's sanction program. Economic reprisals against the Soviet Union entailed a much greater risk for West Germany than the United States; therefore, it is not surprising that there was a great deal of disagreement between the two countries over these measures.

As a minimum, the United States desired from her NATO allies agreements to grant no exceptions for the Soviet Union to the coordinating committees (COCOM) list of exports banned to Communist countries. In addition Washington sought allied support to expand the COCOM list to cover, among other things, a much wider range of computers and software, oil and gas field equipment, steel mill equipment, communications equipment, and various other high technology wares. [Ref. 112: p. 59] The United States also

asked for a total cutoff of official credit to the Soviet Union and a continued joint embargo of grain exports and re-exports to the U.S.S.R. The Soviets for their part hinted at cutbacks in trade between West Germany and the COMECON countries (the value of which is now approaching that between West Germany and the U.S.), and issued veiled hints that access to Berlin might again be impeded, while canceling a number of detente-oriented meetings with Bonn.

Against this background, Chancellor Schmidt after a fireside White House chat on world affairs in April 1980, stated that,

While observing all treaty commitments, we shall arrange our economic ties with the Soviet Union in such a way that our economy does not derive advantage from measures taken by fellow allies. But we shall nevertheless continue to regard trade and economic cooperation with all of the countries of Eastern Europe as important elements in our policy of fostering European stability. [Ref. 111: p. 6]

The Chancellor had earlier specified that West Germany would not break agreements already signed with the Soviets and would only go along with an addition tightening of the rules providing all Western bloc nations did the same.

Economic Minister Otto Graf Lambsdorff later added that,

While Germany may display a good measure of solidarity with the U.S. against Russia on Afghanistan, it has no plans to drop its commercial dealings with other members of the Warsaw Pact. They have no troops in Afghanistan so we can go ahead with business as usual. [Ref. 113: p. 66]

Three months later, following a meeting between Count Lambsdorff and Soviet Deputy Premier Nikoli Tikhonov, it was announced that Bonn and Moscow were to intensify and extend economic cooperation, especially in the energy sector, between that time and the end of the century. Count Lambsdorff remarked that "Our economic ties are satisfactory, but they cannot be viewed separately from the background of international affairs." [Ref. 114: p. 1]-- a rather ironic statement in view of the circumstances and the timing.

In short, trade between the Federal Republic, the Soviet Union and East European countries--the linchpin of the detente process--proved to be a double-edged sword. Although economic interaction does provide many benefits for West Germany and allows for some penetration of the Soviet bloc, these same economic ties effectively negated West German support for the primary non-military weapon that the West possessed to influence Soviet behavior after Afghanistan.

The question of the Olympic boycott highlighted again West Germany's cautious attitude about making any move that would openly antagonize Moscow. Although many on either side of the Atlantic felt that politics should not interfere with the Olympics, Europeans also felt that President Carter's boycott ultimatum to Moscow virtually overrode his allies. For this reason, as late as February

1980, Bonn still gave the impression that the question of West German participation was still open. Significantly, even after Bonn's declaration that West Germany would not participate, Foreign Minister Hans-Dietrich Genscher felt it necessary to remind his countrymen that there was a quid pro quo: "We shall not deny the U.S. our solidarity in the question of the Olympic Games," announced Genscher, "but we expect solidarity from the U.S. on the Berlin question." [Ref. 113: p. 59] The Olympic boycott pales in comparison to other measures directed against Moscow, but it has the potential to greatly diffuse the propaganda advantages Moscow would have gained with a full-participation event. In any case it was a low risk method for demonstration of Western solidarity that did not achieve the optimum results.

The controversies over economic sanctions and the Olympic boycott highlight the general disagreement between Bonn and Washington that transpired after Afghanistan. While West Germans tended to view American policies as short-sighted and provocative, there was a growing conviction in the United States that the Federal Republic was attempting to remain outside of the super-power rivalry, and that Chancellor Schmidt too often resembled the mediator rather than the ally.

C. SUMMARY AND FUTURE PROSPECTS

West Germany's new strength and new willingness to flex her muscles will bear significantly on every issue from the immediate and medium term balance of power to the long-term avoidance of a declining Western ability to influence events in Europe or such vital regions as the Persian Gulf area. While most Americans see the Federal Republic allying herself with the United States not only by force of circumstance and geography, but by preference, for West Germans the choice is in fact hard, subtle, and complex. This becomes apparent when one analyzes the manner and degree to which the Federal Republic expects to contribute to the security of Western oil supplies flowing from the Persian Gulf region.

As a strong Western industrialized country, West Germany has the potential to make a large contribution to Western security, especially in Europe. In addition, it is possible that the Bundesmarine may in the future accept a larger role within the confines of the Atlantic or Mediterranean, thus releasing maritime assets of the United States, France and/or Great Britain for use elsewhere. However, the prime contribution expected by the Federal Republic's allies, especially the United States, lies within the economic sphere. It is within this realm that the Federal Republic is expected to contribute support for key NATO allies such as Turkey and

accelerate the fulfillment of key measures under the LTDP in order to improve the conventional defense and deterrent capabilities of NATO Europe. The former contribution, the support of Turkey, implies close political and economic relations between Bonn and Ankara, while the latter, acceleration of the LTDP, implies increased defense spending. On both of these counts, American confidence in West German intentions is decreasing.

The trend in West German defense spending to a point where growth after adjustment for inflation will reach zero or negative growth has already been discussed and there are clouds on the horizon concerning West German aid to Turkey. European governments, including the Federal Republic, continue to impose political and economic sanctions on Turkey citing anti-democratic actions on the part of the Turkish government. The OECD led by West Germany and Scandinavian countries recently cut off 600 million dollars in economic aid to Turkey in 1981, and the Common Market has suspended talks on full Turkish membership in that organization until democracy is restored in Turkey. [Ref. 115: p. 19] While it is true that the United States in the past has used the boycott weapon on Turkey when it was perhaps not in the best interest of NATO, it is difficult to reconcile Bonn's policy on Turkey with Bonn's policy on Poland recently.

In the case of Turkey, a key strategic NATO ally plunged into military government by a systematic campaign of terrorism, West Germany has deferred a decision on 1982 aid because of tardiness in returning to democratic rule. In the case of Poland, a Warsaw Pact member, upset by an outbreak of freedom, West Germany argues for the continuation of aid in the face of the reimposition of totalitarianism.

Naturally this is a highly simplified view of the situation and doesn't reflect the West German economic stakes or political investments in the Polish situation; but in conjunction with American concern over West German defense spending, this anomaly calls into question West German intentions concerning their role within the NATO "division of labor." These concerns were outlined in a recent article in Aviation Week and Space Tehcnology [Ref. 116: p. 65], which claimed that a cautious move is underway by the Reagan administration to deemphasize the central region of NATO, and in particular, U.S. reliance on West Germany as the centerpiece of Western strategy in Europe:

According to high level State and Defense department officials there has been a shift by the administration in the direction of France and the United Kingdom as strong alliance partners at a time when the resolve of West Germany to meet the Soviet threat is weakening.

This report may exaggerate the situation somewhat, but it cannot be denied that the intrusion of extra-regional

crises such as the increasing vulnerability of Western oil supplies has strongly contributed to change in Washington-Bonn bilateral relations. This, plus the increasingly independent policy of the Federal Republic within the Western alliance necessitates a redefinition of West Germany's role in American foreign policy, particularly in relation to the protection of Western oil supplies from the Persian Gulf Region.

V. COMPARATIVE ANALYSIS OF FRENCH AND
WEST GERMAN POLICIES

France and the Republic of Germany exhibit differences and similarities in relation to their interests in the security of the Persian Gulf as well as their capabilities and intentions to contribute to its defense. As the United States continues to lead in formulating a response to threats in this region, it is necessary to understand the individual strengths and weaknesses of allies in order that each country can perform the tasks for which it is best suited.

France and West Germany share several significant interests in the security of the Persian Gulf region. Foremost among these is their direct reliance on energy supplies from the region. Second, both countries are involved in interlocking economic and security arrangements with other industrial countries such as the United States which heavily depend upon Persian Gulf sources of energy. While some of these Western industrial partners, such as Great Britain and Norway, have to a large degree escaped from reliance on Persian Gulf sources since 1973, the United States has increased the share of its oil imports from this region. In addition, France and West Germany share the West's concern that the Soviet Union and

its East European allies could become serious competitors for energy from this region in the future.

Concerning direct reliance on OPEC and the Arab members of OPEC, the Federal Republic of Germany is in a somewhat better position than France. Table 3 shows that by 1979 West Germany had cut oil imports from OPEC to almost 60 percent of total oil imports while France still depended on OPEC for 85.5 percent of her oil imports. The imports from Arab members of OPEC were 40.6 percent and 70.8 percent for West Germany and France, respectively. Additionally, the Federal Republic possesses the advantage of significant domestic reserves of coal, which constitute a more expensive source of energy than oil but nevertheless a secure source in an emergency. France, on the other hand, has negligible domestic coal reserves.

Whereas the Federal Republic possesses an advantage over France concerning coal reserves, France has a more advanced and ambitious nuclear energy program than West Germany. While nuclear plant construction has been frozen in West Germany due to environmental pressure, the French government continues to develop this energy source though at a reduced construction rate under Mitterrand's leadership.

Both countries are striving to develop alternative sources of energy to diversify supply sources, and to improve conservation techniques. In these areas an

important development has been the natural gas deal that both countries have entered into with the Soviet Union. The Yamal natural gas pipeline deal will increase the share of Soviet gas in West Germany's gas imports to almost 30 percent and the share of Soviet gas in West Germany's overall energy needs to about 5 percent. For France, this project will more than double current French gas imports from the Soviets to 25 percent of France's natural gas supplies and raise French dependence on Soviet gas to 4 percent of her total energy needs.

In short, the energy situation of West Germany in the short term looks better than that of France when one considers the percentage of their respective oil imports from the OPEC suppliers and West Germany's coal reserves. France in the future may overcome this West German advantage with her more aggressive nuclear program. However, the present slight advantage of West Germany must be tempered by the realization that her economy is more heavily dependent on exports and her primary trade partners, including France, are vulnerable to energy disruptions in the Persian Gulf region. For these reasons, neither France nor West Germany can ignore the necessity for developing political, economic, and military capabilities to protect their interests in this region.

The capabilities of France and West Germany to contribute to the security of the Persian Gulf region vary

widely, especially in the military sphere. Whereas both countries can provide a degree of political and economic influence in the Gulf region, only France can project military power into the area. West Germany, on the other hand, makes an indirect contribution to Persian Gulf security through German conventional military power in central Europe. West German strength in central Europe may permit France and the U.S. to dedicate more resources to the Persian Gulf.

Politically, both France and the Federal Republic are involved with the Middle East and Persian Gulf states due to historical linkages and economic relationships. Owing in part to energy dependence on the Arab states, each maintains a more pro-Arab line than the United States concerning the Arab-Israeli conflict. Thus both have the potential to act as a political bridge between the Arab world and the West that is essentially denied to the United States because of American support for Israel. In this respect, West Germany is more constrained than France because of the general feeling of obligation to Israel which resulted from the genocide during World War II.

France and the Federal Republic maintain economic and arms transfer relationships with Middle East and Persian Gulf states. However, the so-called arms-for-oil relationship seems to be aimed more at gaining political influence than maintaining regional stability, and in this

respect France is more directly involved than West Germany. For the French there is little incentive to forego arms sales simply because they might destabilize the military balance in the Middle East. [Ref. 117: p. 26] Conversely, West Germany has declined to offer armored equipment to both Saudi Arabia and Iran during the past. However, in comparison to France, West Germany can offer developing oil-producing Arab states a somewhat wider variety of industrial products. In short, in the area of potential influence stemming from arms relations or industrial trade, France has the advantage in the former while West Germany maintains the upper hand in the latter.

Militarily, West Germany has much less potential than France to influence events in the Gulf region, although West German efforts in Turkey must be considered in this respect. Conversely, West Germany is more influential as an American partner in the maintenance of deterrence and the defense of Europe, although this must be tempered by the existence of French nuclear and conventional forces in Europe. France, unlike the Federal Republic, possesses a diversified military force responsible for global commitments.

West Germany possesses no counterpart to the French intervention forces or global naval capabilities. Nor does the Federal Republic maintain overseas military bases comparable to the French bases in Djibouti, Reunion,

or Mayotte. Moreover, West German military power has never been used abroad since 1945 (with the exception of the Mogadishu operation by Bonn's anti-terrorist (GSG-9 team). West Germany could reap the belated fruits of the Versailles settlement which, in 1919, relieved the Weimar Republic of all of the Reich's colonial possessions. Without colonies, there were no colonial wars to be fought. The Federal Republic could enjoy the blessings of military inaction while England, France, and the United States squandered their blood and treasure in military interventions around the globe. [Ref. 118: p. 68]

In contrast, France was involved in protracted wars in Indochina and Algeria, and has conducted numerous military interventions from Suez in 1956 to Zaire in the recent past. France still maintains a global network of overseas possessions and is one of a few countries in the world to permanently deploy naval forces abroad. In short, France has the capacity and the potential motivation to militarily assist American forces if it becomes necessary in the Persian Gulf region, whereas West Germany does not.

In Europe a comparison of military capabilities becomes more complex. On one hand, the Federal Republic fields the largest and best-equipped conventional forces on the central front, which are fully committed to the Alliance and determined to defend their territory within the forward defense strategy. These assets are

complemented by naval forces primarily designed and oriented toward a strictly regional function in the Baltic Sea and North Atlantic. France, on the other hand, fields a smaller, but capable conventional army whose role in a conflict in Europe is still ambiguous. Equally ambiguous is the role of the French independent nuclear force. The French navy is much larger and more diversified than that of West Germany and possesses limited sea control and amphibious capabilities, as well as aircraft carriers. These naval elements could operate either in the Atlantic or on NATO's southern flank in the Mediterranean. Both France and West Germany contribute to deterrence in Europe--France with her independent nuclear force (and to a lesser degree, with her conventional forces) and West Germany with her large conventional forces on the central front.

France and the Federal Republic each face constraints on their ability to contribute to deterrence and defense in Europe and to the security of the Persian Gulf region. Foremost among these constraints is the effect of the general Western economic slowdown, which has resulted in closer scrutiny to the relationship between "guns and butter" in national budgets. The debate over defense spending has resulted in greater cutbacks in West German defense allocations than those of France in spite of the fact that the Federal Republic's inflation rate has

remained below that of France and her economic growth has exceeded that of France. Despite this fact, key sectors of France's conventional force have suffered due to traditional heavy spending on nuclear development at the expense of conventional assets, particularly the navy. The Federal Republic does not spend billions of dollars on an independent nuclear force, and it has a larger gross national product (GNP) to draw from; therefore, the effects of a lower percentage of GNP allocated to defense are ameliorated somewhat. Nevertheless, limits on defense spending as a result of the global economic situation will continue to constrain the contributions of both countries to the security of the Persian Gulf region.

A comparison of French and West German intentions relating to the security of the Persian Gulf area necessitates consideration of several factors. First, by virtue of different geographic and historical situations, each country has different potential roles and interests. Whereas the Federal Republic is more suited to (and insists upon) a regional role in the maintenance of deterrence and defense in Europe, France is better disposed and motivated to assume an overseas role in the Persian Gulf region. Thus, an assessment of West German intentions largely consists of examining her willingness to assume greater responsibilities for the defense of

Europe and Turkey, while French intentions must be evaluated against her willingness to cooperate with other Western nations in the Persian Gulf region. Second, both countries' intentions largely depend on how they view their relationship vis a vis the United States and Soviet Union.

Considering the second factor first, both France and West Germany share a considerable interest in the gradual transformation of the international order but traditionally have chosen different vehicles to achieve this end. The Federal Republic aspires to eventual national reunification and a prosperous Germany. France also dreams of leading Europe from disunity and dependence to a new position of global strength. Whereas the West German approach assumes close cooperation with the United States within the Atlantic Alliance, the French chose an independent route. While West Germany depended on her strong economy and the perception of American power to pursue her goals, France depended on her independent nuclear strength.

The impact of the 1973 oil crisis and events since that time have had different effects on French and West German policies. West Germans have become increasingly fearful of the erosion of their sources of strength--their economy and the perception of American power--with

the consequent determination of the Federal Republic to protect her economy and rely less on American perceptions of how to best protect Western security interests. France, on the other hand, must realize that her nuclear deterrent force cannot protect her extensive overseas interests and that her independent foreign policy must be modified to include closer overseas cooperation with her Western allies, particularly the United States. In effect, France and West Germany are moving toward a reversal of the traditional relationships which they have shared with the United States--France's policies are becoming less independent while West Germany's are becoming more independent.

This evolution has as its catalyst the increasing need for Western political and military efforts to ensure the security of the Persian Gulf region. Since the invasion of Afghanistan, France has made clear her direct interest in the Gulf region and her appreciation of American efforts to ensure its stability. The French government has been very accommodating by allowing the use of Djibouti as an airfield for American maritime patrol aircraft, and French officials have acknowledged the similarity of American and French military goals in the area. Moreover, the French have emphasized their interest in the region by a show of naval force,

including the deployment of minesweeping forces for potential use in the Straits of Hormuz. In a more general demonstration of a strategic concern, France continues to increase her defense spending above the three percent goal which NATO had set for itself.

In contrast, the Federal Republic has been less forthcoming. Unable (and unwilling) to contribute militarily to the security of the Persian Gulf area, West Germany has assumed responsibility for improving NATO's defense in Europe and for strengthening Turkey. This largely translates to increased defense spending and closer political and economic ties with Turkey. Nevertheless, West German defense spending as a percentage of GNP has been decreasing and relations with Turkey have deteriorated since the September 1980 imposition of martial law in Turkey. This diverse trend in French and West German policies would support recent French statements that France is Washington's most reliable European partner in the East-West confrontation.

VI. CONCLUSION

In the past decade, a sense of energy vulnerability has been added to the more enduring sense of Western vulnerability in Europe. Ever since 1969 the United States has defined conventional force adequacy as the capability to deal simultaneously with one major and one minor contingency in conjunction with our allies. [Ref. 119: p. 7] However, since the Soviet invasion of Afghanistan and the Iranian Revolution, it has become apparent that the stakes in a "minor contingency" in the Persian Gulf region could be very large--a serious disruption of energy flow due to a local conflict or a Soviet attack in the Gulf would amount to an indirect attack on Europe with serious consequences for the United States as well.

Moreover, the rapid build-up of American forces in the Gulf region (requiring the transfer of naval assets from the Mediterranean and Pacific theaters) demonstrated that the additional threat can only be met (at least in the short-term) by the redeployment of part of the total of the West's existing military assets in accordance with a reassessment of strategic priorities. In addition to a transfer of American maritime power to the Indian Ocean, this has resulted in a reorganization of the United States strategic reserve into the Rapid

Deployment Joint Task Force (RDJTF), a search for base access rights, upgrading of existing facilities in the areas, and the positioning of prestocked cargo ships at Diego Garcia. However, much more needs to be done; the demand for a capability in the Gulf is in addition to, not simply part of, the traditional capability needed in the European theater.

American policy-makers have said in the past that in conjunction with our allies we want to be able to protect critical alliance interests that are endangered by a non-nuclear attack on the periphery by meeting such an attack on its own level. In addition, the goal has been to respond rapidly and decisively in order to frustrate a quick takeover which would present us with a fait accompli while at the same time maintaining the capability to fight or to deter a large war happening at the same time or shortly thereafter. [Ref. 75: p. 4] Presently, the ability of the Western allies to accomplish these goals in the Persian Gulf area with a high degree of confidence is questionable.

The increased efforts required to provide such a capability can not be supplied by the United States alone. This fact has been the basis for renewed American pressure on all of the allies to improve their defense potential and cooperation with the United States. Although indigenous Persian Gulf states such as Saudi Arabia and

other allies such as Japan are an important part of this strategy, NATO Alliance members are the key to this endeavor. In this respect France and the Federal Republic of Germany are of paramount importance--France, because of her experience and capabilities in the Persian Gulf area, and West Germany by virtue of her position as the centerpiece of Western conventional deterrence and defense in Europe.

This analysis of French and West German policy concerning the dual problem of protecting Western interests in the Persian Gulf region while maintaining a credible posture in Europe has demonstrated that France's present perception of the threat and of remedial actions to be taken are closer to American views than are those of West Germany. This presents a dilemma for American alliance strategy when dealing with the Persian Gulf situation. When the United States takes and implements decisions for the entire alliance, it is reproached for arrogance (a situation the French are particularly sensitive to). When, on the other hand, the United States attempts to comprehensively incorporate European governments into the decision-making process, Europeans are prone to complain of inadequate American leadership (a condition West Germans are particularly sensitive to).

Within this framework, the United States must continue to nurture the seeds of cooperation that have developed

between French and American policy-makers, being careful not to pressure French cooperation beyond the point which evokes protests regarding "NATO-ization" from Gaullists or Leftists in France. The direction in which French and American cooperative measures are moving in relation to the Persian Gulf problem provides advantages for both countries. The United States gains confidence in the capability and intention of France to contribute to joint Western efforts in the region and the low profile nature of these bilateral relations enables French leaders to maintain the Gaullist legacy of an independent foreign policy. The fact that France still remains outside the integrated military structure of NATO creates some advantages concerning cooperation in the Gulf region. The consensus of opinion within NATO dictates that military planning and/or intervention in this region must be conducted on a strictly multilateral or bilateral basis outside the organizational framework of the Alliance; thus French absence from the integrated military structure of NATO is irrelevant in this case. Moreover the French seem immune to the widespread NATO tendency whereby member countries base their defense budgeting on a careful comparison with their allies' efforts and often feel justified in not overly exceeding the lowest common denominator.

The growing lack of agreement with West Germany presents a more formidable problem for American policy-makers. West German efforts to "fill the gap" in Europe and in Turkey under the so-called division of labor concept have fallen short of American expectations. Lately, as in the initial stages of the Polish crisis, the Federal Republic has even declined to offer verbal support for the American position. As a sovereign power the Federal Republic is certainly entitled to pursue her perceived national interests; however, the American public and its leadership are becoming increasingly critical of the West German position at a time when the United States is embarking on a massive military build-up with huge economic costs. This improvement of American capabilities itself will perhaps restore West German confidence in American power and provide the impetus for renewed West German defense efforts. If not, the consequences for NATO alliance cohesion could be ominous.

The potential roles of France and West Germany in the strategy to ensure the future security of the Persian Gulf region are substantial. The image that the Western allies are being dragged along somewhat unwillingly on American coattails must be dispelled if the American public and leadership are to continue to support American political, economic, and military efforts to improve the Western posture in the region. For France and West

Germany the agreement to pay a subscription to join the Persian Gulf "out of area" club would confer a right to have some say in how the West should respond to events in distant regions rather than surrendering the initiative in this respect entirely to the United States.

The present situation that the West faces in the Persian Gulf region brings to mind Lenin's statement in 1920 concerning how the Soviet Union survived the aftermath of the Russian Revolution:

Weak, torn apart, downtrodden Russia...turned out victorious...against the rich mighty countries which rule the world...Why?....Because among those powers was not a shadow of unity, because all of them worked at cross purposes. [Ref. 120: p. 70]

This statement has even more relevance today, for the Soviet Union can hardly be considered a weak, torn apart, downtrodden nation.

TABLE 1

PRIMARY ENERGY CONSUMPTION IN GERMANY
FOR 1973 AND ESTIMATES FOR 1985²

<u>Energy Sources</u>	<u>1973</u>		<u>1985 Projections</u>			
			1973 estimate		1974 estimate	
	<u>Mtoe¹</u>	<u>%</u>	<u>Mtoe</u>	<u>%</u>	<u>Mtoe</u>	<u>%</u>
Oil	139	55	220	54	163	44
Bitumous Coal (domestic)	56	22	33	8	53	14
Natural Gas (imported and domestic)	26	10	62	15	68	18
Lignite (domestic)	22	9	25	6	25	7
Nuclear Energy	3	1	60	15	54	15
Other	7	3	7	2	7	2
Total	<u>253</u>	<u>100</u>	<u>407</u>	<u>100</u>	<u>370</u>	<u>100</u>

¹Mtoe, million tons of oil equivalent

²Adapted from Mendershausen, Horst, Coping with the Oil Crisis: French and German Experiences, (Johns Hopkins University Press) Baltimore, 1976, p. 87

TABLE 2

PRIMARY ENERGY CONSUMPTION IN FRANCE
FOR 1973 AND ESTIMATES FOR 1985²

<u>Energy Sources</u>	<u>1973</u>		<u>1985 Projections</u>			
			1974 estimate		1975 estimate	
	<u>Mtoe¹</u>	<u>%</u>	<u>Mtoe</u>	<u>%</u>	<u>Mtoe</u>	<u>%</u>
Oil (imported)	117	67	127	48	97	40
Coal (domestic and imported)	31	17	20	8	30	13
Gas (domestic and imported)	15	9	37	14	37	16
Primary Electricity	13	7	79	30	73	30
Nuclear	(3)	(2)	--	--	(60)	(25)
Other	--	--	--	--	3	1
Total	<u>176</u>	<u>100</u>	<u>263</u>	<u>100</u>	<u>240</u>	<u>100</u>

¹Mtoe, million tons of oil equivalent

²Adapted from Mendershausen, Horst, Coping with the Oil Crisis: French and German Experiences (Baltimore: Johns Hopkins University Press, 1976) p. 89.

TABLE 3
COMPARISON OF FRENCH AND WEST GERMAN OIL IMPORTS 1973/79

	<u>France</u>				<u>Germany</u>			
	<u>1973</u>	<u>%</u>	<u>1979</u>	<u>%</u>	<u>1973</u>	<u>%</u>	<u>1979</u>	<u>%</u>
Algeria	222	8.2	102	3.7	268	12.2	196	6.6
Bahrain	---	---	0	---	---	---	0	---
Egypt	---	---	0	---	---	---	8	---
Qatar	426	15.8	76	2.8	178	8.2	10	---
UAE	---	---	173	6.3	---	---	151	5.1
Syria	---	---	43	1.6	---	---	17	---
Iraq	374	13.8	489	17.7	30	1.4	45	---
Kuwait	310	11.5	97	3.5	88	4.1	63	2.1
S. Arabia	606	22.4	893	32.3	498	22.8	359	12.0
Libya	<u>130</u>	<u>4.8</u>	<u>83</u>	<u>3.0</u>	<u>516</u>	<u>23.6</u>	<u>358</u>	<u>12.0</u>
OAPEC	2068	76.3	1956	70.8	1578	71.9	1207	40.6
Ecuador	negl.	---	0	---	negl.	---	0	---
Gabon	48	1.8	29	1.0	26	1.1	18	---
Indonesia	negl.	---	2	---	negl.	---	9	---
Iran	216	8	140	5.0	280	12.8	233	7.8
Nigeria	252	9.3	193	7.0	204	9.3	294	9.9
Venezuela	<u>36</u>	<u>1.3</u>	<u>84</u>	<u>3.0</u>	<u>42</u>	<u>1.9</u>	<u>32</u>	<u>1.0</u>
OPEC	2620	96.7	2361	85.5	2130	97.1	1768	59.5
Canada	negl.	---	0	---	negl.	---	4	---
Mexico	negl.	---	0	---	negl.	---	0	---
Other	89	3.3	358	13.0	62	2.8	1175	39.5
Total	2709	100	2762	100	2192	100	2972	100
Oil								
Consumption	2485		2422		2985		2901	

(Figures are in thousands of barrels of oil per day)

Figures are derived from The Handbook of Economic Statistics, 1980, National Foreign Assessment Center and Mendershausen, Horst, Coping with the Oil Crisis: French and German Experiences (Baltimore: Johns Hopkins University Press, 1976) p. 30.

LIST OF REFERENCES

1. Turner, Louis, "European and Japanese Energy Policies," Current History, March 1978.
2. deCarmoy, Guy, Energy for Europe, Economic and Political Implications, American Enterprise Institute for Public Policy Research, 1977.
3. Vernon, Raymond, The Oil Crisis, W.W. Norton and Company Inc., 1976.
4. Menderhausen, Horst, Coping with the Oil Crisis: French and German Experiences, The Johns Hopkins University Press, 1976.
5. Stingelin, Peter, "Europe and the Oil Crisis," Current History, March 1975.
6. Handbook of Economic Statistics, National Foreign Assessment Center, U.S. Government Printing Office, Washington, D.C., October 1980.
7. Dunn, Robert M., Jr., Economic Growth Among Industrialized Countries, National Planning Association, 1980.
8. "Bashing Mr. Barre," The Economist, 10 March 1979.
9. "Early End of Europe's Slump is Doubted," Wall Street Journal, 3 June 1981.
10. Dunkerley, Joy, ed., International Comparisons of Energy Consumption, Resources for the Future, 1978.
11. Evans, Douglas, Western Energy Policy, St. Martin's Press, 1979.
12. "Putting Steam Behind an EEC Energy Policy," The Economist, (September 29, 1979), p. 41.
13. Weertz, Peter, "Economic tough line leaves risk of Soviet counter-action," Die Welt, 10 April 1980, quoted in The German Tribune 27 April 1980.
14. Farrell, Katrina, "Fighting OPEC with Biomass," Europe, May-June 1981.

15. Kemezis, Paul, "Finally Saying Enough," Europe, September-October 1980.
16. Dafter, Ray, "World Oil Production and Security of Supplies," International Security, March 1980.
17. Conant, Melvin and Ebinger, Charles, "Tremors in World Oil: The Consequences of Iran," International Security, March 1980.
18. Economist, 1 September 1979.
19. "Europe aims to forge a special oil bargain," Business Week, 20 August 1979.
20. Blau, Thomas and Kirchheimer, Joseph, "European Dependence and Soviet Leverage: The Yamal Pipeline," Survival, September/October 1981.
21. "A big gas deal strains the U.S. embargo," Business Week, 15 December 1980.
22. "On to Siberia," Wall Street Journal, 7 August 1981.
23. "Germany sets accord to buy gas from Soviets," Wall Street Journal, 23 November 1981.
24. Marshall, Bruce, "The Evolving French Strategic Debate," Strategic Review, Spring 1980.
25. Lunn, Simon, NATO After Afghanistan, Congressional Research Service, The Library of Congress, 22 August 1980.
26. Yost, David S., "French Defense Budgeting: Executive Dominance and Resource Constraints," Orbis, Fall 1979.
27. Close, Robert, Europe Without Defense? 48 Hours That Could Change the Face of the World, Pergamon Press, 1979.
28. Lannuzel, F.R., "The French Navy and its Future," Navy International, July 1979.
29. "Situation of French Forces," Atlantic News 4 June 1980.
30. Niemes, Claude, "France as a Naval Power," NATO's Fifteen Nations, October-November 1978.

31. Lacoutre, John E. "Seapower in the Indian Ocean: A Requirement for Western Security," U.S. Naval Institute Proceedings, August 1979.
32. Foreign Broadcast Information Service, Western Europe, 1 February 1980.
33. The Western World, 26 March 1981.
34. Kolodjiez, Edward A., "France and the Arms Trade," International Affairs, 1980.
35. Atlantic News, 28 December 1979.
36. Atlantic News, 5 September 1979.
37. Atlantic News, 30 January 1980.
38. Klein, Jean, "France and the Arms Trade," in Gannizzo, C. (ed.), The Gun Merchants, Pergamon Press, 1980.
39. Foreign Broadcast Information Service, Western Europe, 28 January 1980.
40. Mery, Guy, "The Future of the French Army," Atlantic Community Quarterly, Fall, 1978.
41. "France's role in Africa: The Colonial Master who didn't go home," Wall Street Journal, 22 July 1981.
42. Foreign Broadcast Information Service, Western Europe, 3 January 1980.
43. Roberts, Stephen S., Naval Policy Outside of Europe, pp. 291-305.
44. "Giscard discusses France's independent policy, Afghanistan, and the future of detente," French Embassy Press and Information Division 80.26
Televised interview, 26 February, 1980.
45. Foreign Broadcast Information Service, Western Europe, 25 January, 1980.
46. Foreign Broadcast Information Service, Western Europe, 9 January, 1980.
47. Foreign Broadcast Information Service, Western Europe, 7 February, 1980.

48. Statements from France, Press and Information Service of the French Embassy, 81/59, Interview with External Relations Minister Calude Cheysson in Le Monde, 28 May, 1981.
49. Sloss, Leon, NATO Reform: Prospects and Priorities, The Washington Papers Vol III Center for Strategic and International Studies, 1975.
50. Yost, David S., "The French Defense Debate" Survival, January/February 1981.
51. Atlantic News, 19 September, 1979.
52. The Western World, 26 March, 1981.
53. Foreign Broadcast Information Service, Western Europe, 11 February, 1980.
54. Atlantic News, 30 January 1981.
55. Artuer, Stephen J., "Detente policy before and after Afghanistan," The German Tribune, Political Affairs Review, 8 June, 1980.
56. Ryan, Francis W., "France under Giscard," Current History, May 1981.
57. Marshall, Bruce D., "Mitterrand's Defense Policies: The Early Signals," Strategic Review, Fall 1981.
58. Atlantic News, 1 August, 1980.
59. Wall Street Journal, 16 October, 1981.
60. "Zaire's ills, changed French attitudes, signal challenges to U.S. African goals," Wall Street Journal, 14 September, 1981.
61. Interview with Claude Cheysson by Jacques Amaric and Maurice Delarue in Le Monde, 28 May, 1981, Press and Information Service of the French Embassy 81/59.
62. Related to this author by Professor David S. Yost, Naval Postgraduate School, Monterey, CA upon his return from a research trip to Paris from 23 November-2 December, 1981.

63. Sabrosky, "French Foreign Policy Alternatives," Orbis, Winter 1976, pp. 1429-1447 quoted in Yost, David, "French defense budgeting: executive dominance and resource constraints," Orbis, Fall 1979, p. 579.
64. The Federal Minister of Defense, The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces, White Paper, 1979.
65. Sohlberg, Ragnhild, Manpower Procurement Policies, Ground Force Structures, and Registration Systems: Denmark, The Federal Republic of Germany, Norway, and the United Kingdom. Thesis, Naval Postgraduate School, Monterey, California, 1981.
66. Poeppel, Hans, "NATO Armies-FRG," NATO's Fifteen Nations, Special no. 1, 1980.
67. "The Bundeswehr Today," The German Tribune, 30 November 1980.
68. "Bundesmarine to Redress NATO's Naval Balance," The German Tribune, 3 August 1980.
69. "The Problems in the Baltic," NATO's Fifteen Nations, April-May 1978.
70. Close, Robert, Europe Without Defense? 48 Hours That Could Change the Face of the World, Pergamon Press, 1979.
71. "The Luftwaffe," NATO's Fifteen Nations, Special Issue no. 2, 1979.
72. Fock, Harold, "German Submarine Construction for Export," NATO's Fifteen Nations, February-March 1981.
73. "Shipbuilding Ban Lifted," The German Tribune, 3 August 1980.
74. "Planned NATO measures to deal with the Afghan situation," Atlantic News, 16 April 1980.
75. Wohlstetter, Albert, "Protecting Persian Gulf Oil: U.S. and Alliance Military Policy," Background paper for the Security Conference on Asia and the Pacific (SECAP) Workshop. Tokyo, Japan, 23-25 January 1980.
76. Kiep, Walter Leisler, "Strengthening our Turkish Partner: Germany Spearheading the Effort," NATO's Fifteen Nations, June-July 1979

77. "A Boost for Turkey," The German Tribune, 10 February 1980.
78. "Bonn to provide arms, assistance to Turkey and Pakistan," Foreign Broadcast Information Service, Western Europe, 29 January 1980.
79. "Rescue Plans Draw-up for Turkey," The German Tribune, 2 March 1980.
80. "Genscher in the Gulf and Middle East," The German Tribune, 22 February 1981.
81. Beck, Walter, "Mystery over MP's free-lance tour of the Middle East," The German Tribune, 19 August 1979.
82. "Germany, The Reluctant Ally," Business Week, 3 March 1980.
83. "Schmidt's trade mission to Saudi Arabia," The German Tribune, 3 May 1981.
84. Ra'anan, U., R. Pflatzgraff, and G. Kemp (eds.), Arms Transfers to the Third World, Westview Press, 1978.
85. The German Tribune, 2 September 1979.
86. Schueler, Hans, "Potential military dilemma in any Gulf oil-route patrol," The German Tribune, 2 November 1980.
87. Atlantic News, 10 April 1980.
88. Braunthal, Gerald, "West Germany Moves into the 1980s," Current History, May 1981.
89. Shears, David, "Germany's uncertain spring," Europe, May-June 1981.
90. "Extended Conscription, longer NCE training urged for Bundeswehr," The German Tribune, 16 March 1980.
91. Hauser, Erich, "Big Changes in the European Wind," The German Tribune, 13 January 1980.
92. Vardamis, Alex A., "German-American Military Fissures," Foreign Policy, Spring 1979.
93. "Schmidt's Calculabilities," The Economist, 6 October 1979.

94. Mehnert, Klaus, "Ostopolitik: Germany's Political Evergreen," Washington Quarterly, Winter 1981.
95. "Bonn's tighter ties with the East trigger new anxiety," Business Week, 18 August 1980.
96. Johnson, Paul M., "Washington and Bonn: Dimensions of Change in Bilateral Relations," International Organization, Autumn, 1979.
97. Livingston, Robert Gerald, "Germany Steps Up," Foreign Policy, Spring 1976.
98. Maitre, Joachim, "The German 'Summit' and the Pitfalls of Ostpolitik," The Wall Street Journal, 9 December 1981.
99. Atlantic News, 19 November 1980.
100. "Share out the burden, but keep North American troops in Europe," Atlantic News, 14 May 1980.
101. Atlantic News, 22 February 1980.
102. Ruehl, Lothar, The German Tribune, 25 May 1980.
103. Atlantic News, 15 May 1980.
104. Lunn, Simon, NATO After Afghanistan, Washington: Congressional Research Service, Library of Congress, 1980.
105. Foreign Broadcast Information Service, (West Europe) 2 March 1980.
106. "Tornado Crimps German Budget," Aviation Week and Space Technology, 18 August 1980.
107. "West Germany plans zero growth in defense budget," Aviation Week and Space Technology, 10 August 1981.
108. "Germany plans further cuts in arms outlays," The Wall Street Journal, 29 October 1981.
109. "Interview with Willy Brandt," The German Tribune, 20 January 1980.
110. "Invasion proof of detente's failure," The German Tribune, 27 January 1980.

- 111. "Bonn keeps balance between old ties and sanction requirements," The German Tribune, 20 April 1980.
- 112. "A Search for Support in Pressuring Russia," Business Week, 25 February 1980.
- 113. Business Week, 3 March 1980.
- 114. "Bonn, Moscow to extend economic links," The German Tribune, 8 June 1980.
- 115. "Europe's tiff with Turkey worsens," The Wall Street Journal, 29 December 1981.
- 116. "Reagan Attitude Toward German Reliance Shifts," Aviation Week and Space Technology, 27 April 1981.
- 117. Kolodziej, Edward A., "France and the Arms Trade," International Affairs, January 1980, quoted in Laurance, Edward J., "An Assessment of the Arms-for-Oil-Strategy," (First Draft) prepared for Conference on Energy and National Security, National Defense University, 5 November 1980.
- 113. Joffe, Josef, "German Defense Policy: Novel Solutions and Enduring Dilemmas," in Gregory Flynn, The Internal Fabric of Western Security, London: Croom Helm, 1981.
- 119. Department of Defense, Annual Report, Fiscal Year 1981, 29 January 1981.
- 120. Lenin, V.I., Second Congress of the Communist International quoted in Ulam, Adam B., Expansion and Coexistence: Soviet Foreign Policy 1917-1973, Second Edition, Holt, Rinehart, and Winston, 1974.

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